

## **Attachment 8**

### **Rights-of-Way, Conduits and Pole Attachments**

## **Rights-of-Way, Conduits and Pole Attachments**

BellSouth will provide nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by BellSouth pursuant to 47 U.S.C. § 224, as amended by the Act, pursuant to terms and conditions of a license agreement subsequently negotiated with BellSouth's Competitive Structure Provisioning Center.

**Attachment 9**  
**Performance Measurements**

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## **Service Performance Measurements And Enforcement Mechanisms**

### **1. Scope**

This Attachment includes Enforcement Measurements with corresponding Enforcement Mechanisms applicable to this Agreement.

### **2. Reporting**

2.1 In providing services pursuant to this Agreement, BellSouth will report its performance to Adelphia in accordance with BellSouth's Service Quality Measurements, which are contained in this Attachment as Exhibit A and in accordance with BellSouth's Enforcement Measurements, which are contained in this Attachment as Exhibit B.

2.2 BellSouth will make performance reports available to Adelphia on a monthly basis. The reports will contain information collected in each performance category and will be available to Adelphia through some electronic medium to be determined by BellSouth. BellSouth will also provide electronic access to the raw data underlying the performance measurements. Within thirty (30) days of execution of this Agreement, BellSouth will provide a detailed session of instruction to Adelphia regarding access to the reports and to the raw data as well as the nature of the format of the data provided.

### **3. Modifications to Measurements**

#### **3.1 Service Quality Measurements**

3.1.1 BellSouth will update the Service Quality Measurements contained in Exhibit A of this Attachment each calendar quarter. BellSouth will not delete any Service Quality Measurement without prior written consent of Adelphia. Adelphia may provide input to BellSouth regarding any suggested additions, deletions or other modifications to the Service Quality Measurements. BellSouth will provide notice of all changes to the Service Quality Measurements via BellSouth's internet website.

3.1.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Service Quality Measurements. BellSouth will make all such changes to the Service Quality Measurements pursuant to Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by reference.

3.1.3 Notwithstanding any other provision of this Agreement, in the event

a dispute arises regarding the modification or amendment of the Service Quality Measurements, the parties will refer the dispute to the Commission.

3.2 Enforcement Measurements and Statistical Test

3.2.1 In order for BellSouth to accurately administer the Enforcement Measurements contained in Exhibit B of this Attachment, the Enforcement Measurements shall be modified or amended only if BellSouth determines such modification or amendment is necessary. However, BellSouth will not delete any Enforcement Measurement without prior written consent of Adelphia. BellSouth will notify Adelphia of any such modification or amendment to the Enforcement Measurements via BellSouth's internet website.

3.2.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Enforcement Measurements and/or Statistical Test. BellSouth will make all such changes to the Enforcement Measurements and/or Statistical Test pursuant to Section 12 of the General Terms and Conditions of this Agreement, incorporated herein by reference.

3.2.3 Notwithstanding any other provision of this Agreement, in the event a dispute arises regarding the modification or amendment of the Enforcement Measurements and/or Statistical Test, the parties will refer the dispute to the Commission.

4. Enforcement Mechanisms

4.1 Purpose

This section establishes meaningful and significant enforcement mechanisms voluntarily provided by BellSouth to verify and maintain compliance between BellSouth and Adelphia's operations as well as to maintain access to Operational Support System (OSS) functions. This section provides the terms and conditions for such self-effectuating enforcement mechanisms.

4.2 Effective Date

The enforcement mechanisms set forth in this section shall only become effective upon an effective FCC order, which has not been stayed, authorizing BellSouth to provide interLATA telecommunications services under section 271 of the Act within a particular state and shall only apply to BellSouth's performance in any state in which the FCC has granted BellSouth interLATA authority.

4.3 Definitions

4.3.1 Enforcement Measurement Elements means the performance measurements set forth in Exhibit B, attached hereto and incorporated herein by this reference.

4.3.2 Enforcement Measurement Benchmark means a competitive level of performance negotiated by BellSouth used to compare the performance of BellSouth and Adelphia where no analogous process, product or service is feasible. See Exhibit B.

4.3.3 Enforcement Measurement Compliance means comparing performance levels provided to BellSouth retail customers with performance levels provided by BellSouth to the CLEC customer, as set forth in Exhibit C, attached hereto and incorporated herein by this reference.

4.3.4 Test Statistic and Balancing Critical Value is the means by which enforcement will be determine using statistically valid equations. See Exhibit C.

4.3.5 Cell is the point (below the wire center level) at which like-to-like comparisons are made. For example, all BellSouth retail POTS services, for residential customers, requiring a dispatch in a particular wire center, at a particular point in time will be compared directly to Adelphia resold services for residential customers, requiring a dispatch, in the same wire center, at a particular point in time. When determining compliance, these cells can have a positive or negative value. See Exhibit C.

4.3.6 Affected Volume means that proportion of the total Adelphia volume or CLEC Aggregate volume for which remedies will be paid.

4.3.7 Parity Gap refers to the incremental departure from a compliant-level of service. (See Exhibit D). This is also referred to as "diff" in the Statistical paper (See Exhibit C).

4.3.8 Tier-1 Enforcement Mechanisms means self-executing liquidated damages paid directly to Adelphia when BellSouth delivers non-compliant performance of any one of the Enforcement Measurement Elements for any month as calculated by BellSouth.

4.3.9 Tier-2 Enforcement Mechanisms means Assessments paid directly to a state Public Service Commission ("Commission") or its designee. Tier 2 Enforcement Mechanisms are triggered by three consecutive monthly failures in a quarter in which BellSouth performance is out of compliance or does not meet the benchmarks for the aggregate of all CLEC data as

calculated by BellSouth for a particular Enforcement Measurement Element.

4.3.10 Tier-3 Enforcement Mechanisms means the voluntary suspension of additional marketing and sales of long distance services triggered by excessive repeat failures of those specific submeasures as defined in Exhibit D attached hereto and incorporated herein by this reference.

4.4 Application

4.4.1 The application of the Tier-1, Tier-2, and Tier-3 Enforcement Mechanisms does not foreclose other non-contractual legal and regulatory claims and remedies available to Adelphia.

4.4.2 Proof of damages resulting from BellSouth's failure to maintain Enforcement Measurement Compliance would be difficult to ascertain and, therefore, liquidated damages are a reasonable approximation of any contractual damage. Liquidated damages under this provision are not intended to be a penalty.

4.5 Methodology

4.5.1 Tier-1 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State for a given Enforcement Measurement Element in a given month based upon a test statistic and balancing critical value calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by this reference.

4.5.1.1 Tier-1 Enforcement Mechanisms apply on a per transaction basis for each negative cell and will escalate based upon the number of consecutive months that BellSouth has reported non-compliance.

4.5.1.2 Fee Schedule for Tier-1 Enforcement Mechanisms is shown in Table-1 attached hereto as Exhibit E and incorporated herein by this reference. Failures beyond Month 6 (as set forth in Table 1) will be subject to Month 6 fees.

4.5.2 Tier-2 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State in a given calendar quarter based upon a statistically valid equation calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by reference.



- 4.5.2.1 Tier- 2 Enforcement Mechanisms apply, for an aggregate of all CLEC data generated by BellSouth, on a per transaction basis for each negative cell for a particular Enforcement Measurement Element.
- 4.5.2.2 Fee Schedule for Total Quarterly Tier-2 Enforcement Mechanisms is show in Table-2 attached hereto as Exhibit E and incorporated herein by this reference.
- 4.5.3 Tier-3 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for a State in a given calendar quarter. The method of calculation for specified submeasures is identical to the method of calculation for Tier-2 Enforcement Mechanisms as described above. The specific submeasures which are the mechanism for triggering and removing a Tier-3 Enforcement Mechanisms are described in more detail in Exhibit D attached hereto and incorporated herein by this reference.
- 4.6 Payment of Tier-1 and Tier-2 Amounts
- 4.6.1 If BellSouth performance triggers an obligation to pay Tier-1 Enforcement Mechanisms to Adelphia or an obligation to remit Tier-2 Enforcement Mechanisms to the Commission, BellSouth shall make payment in the required amount on or before the thirtieth (30<sup>th</sup>) day following the due date of the performance measurement report for the month in which the obligation arose.
- 4.6.2 For each day after the due date that BellSouth fails to pay Adelphia the required amount, BellSouth will pay interest to Adelphia at the maximum rate permitted by state law.
- 4.6.3 For each day after the due date that BellSouth fails to pay the Tier-2 Enforcement Mechanisms, BellSouth will pay the Commission an additional \$1,000 per day.
- 4.6.4 If Adelphia disputes the amount paid to Adelphia for Tier-1 Enforcement Mechanisms, Adelphia shall submit a written claim to BellSouth within sixty (60) days after the date of the performance measurement report for which the obligation arose. BellSouth shall investigate all claims and provide Adelphia written findings within thirty (30) days after receipt of the claim. If BellSouth determines Adelphia is owed additional amounts, BellSouth shall pay Adelphia such additional amounts within thirty (30) days after its findings along with interest paid at the maximum rate permitted by law.

- 4.6.5 At the end of each calendar year, BellSouth will have its independent auditing and accounting firm certify that the results of all Tier-1 and Tier-2 Enforcement Mechanisms were paid and accounted for in accordance with Generally Accepted Account Principles (GAAP).
- 4.7 Limitations of Liability
- 4.7.1 BellSouth will not be responsible for Adelphia acts or omissions that cause performance measures to be missed or fail, including but not limited to accumulation and submission of orders at unreasonable quantities or times or failure to submit accurate orders or inquiries. BellSouth shall provide Adelphia with reasonable notice of such acts or omissions and provide Adelphia any such supporting documentation.
- 4.7.2 BellSouth shall not be obligated for Tier-1, Tier-2 or Tier 3 Enforcement Mechanisms for non-compliance with a performance measure if such non-compliance was the result of an act or omission by Adelphia that is in bad faith.
- 4.7.3 BellSouth shall not be obligated to pay Tier-1 Enforcement Mechanisms or Tier-2 Enforcement Mechanism for non-compliance with a performance measurement if such non-compliance was the result of any of the following: a Force Majeure event as set forth in the General Terms and Conditions of this Agreement; an act or omission by Adelphia that is contrary to any of its obligations under its Interconnection Agreement with BellSouth; an act or omission by Adelphia that is contrary to any of its obligations under the Act, Commission rule, or state law; an act or omission associated with third-party systems or equipment; or any occurrence that results from an incident reasonably related to the Y2K problem.
- 4.7.4 It is not the intent of the Parties that BellSouth be liable for both Tier-2 Enforcement Mechanisms and any other assessments or sanctions imposed by the Commission. Adelphia will not oppose any effort by BellSouth to set off Tier-2 Enforcement Mechanisms from any additional assessment imposed by the Commission.
- 4.7.5 Payment of any Tier-1 or Tier-2 Enforcement Mechanisms shall not be considered as an admission against interest or an admission of liability or culpability in any legal, regulatory or other proceeding relating to BellSouth's performance. The payment of any Tier-1 Enforcement Mechanisms to Adelphia shall release BellSouth for any liability associated with or related to the service performance measurement for the month for which the Enforcement Mechanisms was paid to Adelphia.

4.7.6 Adelphia acknowledges and argues that the Enforcement Mechanisms contained in this attachment have been provided by BellSouth on a completely voluntary basis in order to maintain compliance between BellSouth and Adelphia. Therefore, Adelphia may not use the existence of this section or any payments of any Tier-1 or Tier-2 Enforcement Mechanisms under this section as evidence that BellSouth has not complied with or has violated any state or federal law or regulation.

4.8 Enforcement Mechanism Caps

4.8.1 BellSouth's liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms shall be collectively capped at \$625M per year for the entire BellSouth region as set forth below.

AL - \$54M	MS - \$44M
FL - \$122M	NC - \$77M
GA - \$131M	SC - \$47M
KY - \$34M	TN - \$57M
LA - \$59M	
Regional Total - \$625M	

4.8.2 If BellSouth's liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms exceed the caps referenced in this attachment, Adelphia may commence a proceeding with the Commission to demonstrate why BellSouth should pay any amount in excess of the cap. Adelphia shall have the burden of proof to demonstrate why, under the circumstances, BellSouth should have additional liability.

4.9 Dispute Resolution

4.9.1 Notwithstanding any other provision of this Agreement, any dispute regarding BellSouth's performance or obligations pursuant to this Attachment shall be resolved by the Commission.

# EXHIBIT A

**ORDERING**

<b>Report/Measurement:</b>	
<b>O-7. Speed of Answer in Ordering Center</b>	
<b>Definition:</b>	
Measures the average time a customer is in queue.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The clock starts when the appropriate option is selected (i.e. 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BST service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until the a service representative in BSTs Local Carrier Service Center (LCSC) answers the CLEC call.	
<b>Calculation:</b>	
$\frac{(\text{Total time in seconds to reach the LCSC})}{(\text{Total Number of Calls}) \text{ in the Reporting Period.}}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Aggregate</li><li>• BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)</li></ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• CLEC Aggregate</li><li>• BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)</li></ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Mechanized tracking through LCSC Automatic Call Distributor</li></ul>	<ul style="list-style-type: none"><li>• Mechanized tracking through BST Retail center support systems</li></ul>
<b>Retail Analog/Benchmark:</b>	
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices. See Appendix D	

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**ORDERING – (LNP)**

<b>Report/Measurement:</b>
<b>LNP-8. Percent Rejected Service Requests</b>
<b>Definition:</b>
Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are excluded.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Service Requests canceled by the CLEC</li><li>• Fatal Rejects</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.</li></ul>
<b>Business Rules:</b>
An LSR is considered "rejected" when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.
<b>Fully Mechanized:</b> There are two types of "Rejects" in the Fully Mechanized category:
<ul style="list-style-type: none"><li>• A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR (via EDI or TAG) but required fields are not populated correctly and the request is returned to the CLEC. Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.</li><li>• An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.</li></ul>
<b>Partially Mechanized:</b> A valid LSR which is electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back to the CLEC.
<b>Total Mechanized:</b> Combination of Fully Mechanized and Partially Mechanized rejects.
<b>Calculation</b>
<b>Percent Rejected Service Requests:</b> $\left[ \frac{\text{[(Number of Service Requests Rejected in the Reporting Period)]}}{\text{[(Number of Service Requests Received in the Reporting Period)]}} \right] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Fully Mechanized, Partially Mechanized, Total Mechanized</li><li>• CLEC Specific</li><li>• CLEC Aggregate</li></ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• Product Reporting Levels<ul style="list-style-type: none"><li>➢ LNP</li><li>➢ UNE Loop with LNP</li></ul></li><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ State, Region</li></ul></li></ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

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**ORDERING – (LNP)**

<b>Report/Measurement:</b>
<b>LNP-9. Reject Interval Distribution &amp; Average Reject Interval</b>
<b>Definition:</b>
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are excluded.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Service Requests canceled by CLEC</li><li>• Fatal Rejects</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.</li></ul>
<b>Business Rules:</b>
<p>The Reject interval is determined for each rejected LSR processed during the reporting period. The Reject interval is the elapsed time from when BST receives LSR until that LSR is rejected back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of rejected LSRs to produce the reject interval distribution.</p> <p>An LSR is considered "rejected" when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.</p> <p><b>Fully Mechanized:</b> There are two types of "Rejects" in the Fully Mechanized category:</p> <ul style="list-style-type: none"><li>• A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC. <i>Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the number of rejected LSRs.</i></li><li>• An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.</li></ul> <p><b>Partially Mechanized:</b> A valid LSR which is electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back to the CLEC.</p> <p><b>Total Mechanized:</b> Combination of Fully Mechanized and Partially Mechanized rejects.</p>
<b>Calculation:</b>
<p><b>Average Reject Interval:</b> <math display="block">\frac{\Sigma (\text{Date \&amp; Time of Service Request Rejection}) - (\text{Date \&amp; Time of Service Request Receipt})}{(\text{Total Number of Service Requests Rejected in Reporting Period})}</math></p> <p><b>Reject Interval Distribution:</b> <math display="block">\frac{[\Sigma (\text{Service Requests Rejected in "X" minutes/hours}) / (\text{Total Number of Service Requests Rejected in Reporting Period})] \times 100}{1}</math></p>
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Fully Mechanized, Partially Mechanized, Total Mechanized</li><li>• CLEC Specific</li><li>• CLEC Aggregate</li></ul>

**ORDERING – (LNP) - Reject Interval Distribution & Average Reject Interval – Continued)**

<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Reported in intervals = 0 - 4 minutes, 4 - 8 minutes, 8 - 12 minutes, 12 - 60 minutes, 0 - 1 hours, 1 - 8 hours, 8 - 24 hours, &gt;24 hours</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ LNP</li> <li>➢ UNE Loop with LNP</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region</li> </ul> </li> <li>• Average Interval in Days</li> </ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

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**ORDERING – (LNP)**

<b>Report/Measurement:</b>
<b>LNP-10. Firm Order Confirmation Timeliness Interval Distribution &amp; Firm Order Confirmation Average Interval</b>
<b>Definition:</b>
Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of a valid LSR to distribution of a firm order confirmation.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>Rejected LSRs (Clarifications or Fatal Rejects)</li> <li>Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.</li> </ul>
<b>Business Rules:</b>
<p>The Firm Order Confirmation interval is determined for each FOC'd LSR processed during the reporting period. The Firm Order Confirmation interval is the elapsed time from when BST receives an LSR until that LSR is confirmed back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed to produce the Firm Order Confirmation timeliness interval distribution.</p> <ul style="list-style-type: none"> <li><b>Mechanized</b> - The elapsed time from receipt of a valid LSR until the LSR is processed and appropriate service orders are generated in SOCS without manual intervention.</li> <li><b>Partially Mechanized</b> - The elapsed time from receipt of an electronically submitted LSR which falls out for manual handling by the LCSC personnel until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS).</li> <li><b>Total Mechanized</b> - Combination of Fully Mechanized and Partially Mechanized FOCs.</li> </ul>
<b>Calculation:</b>
<p><b>Average FOC Interval:</b></p> $\Sigma [(\text{Date \& Time of Firm Order Confirmation}) - (\text{Date \& Time of Service Request Receipt})] / (\text{Total number of Service Requests Confirmed in the Reporting Period})$ <p><b>FOC Interval Distribution:</b></p> $\Sigma [(\text{Service Requests Confirmed in "X" minutes/hours in the Reporting Period}) / (\text{Total Service Requests Confirmed in the Reporting Period})] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>Fully Mechanized, Partially Mechanized, Total Mechanized</li> <li>CLEC Specific</li> <li>CLEC Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>Reported in intervals = 0 - 15 minutes, 15 - 30 minutes, 30 - 45 minutes, 45 - 60 minutes, 90 - 120 minutes, 120 - 240 minutes, 4 - 8 hours, 8 - 12 hours, 12 - 16 hours, 16 - 20 hours, 20 - 24 hours, 24 - 48 hours, &gt;48 hours</li> <li>Product Reporting Levels <ul style="list-style-type: none"> <li>LNP</li> <li>UNE Loop with LNP</li> </ul> </li> <li>Geographic Scope <ul style="list-style-type: none"> <li>State, Region</li> </ul> </li> </ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

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## Provisioning Disaggregation

### Product Reporting Levels

- Resale and Retail
  - POTS – Residence
  - POTS – Business
  - Design
  - PBX (Louisiana SQM)
  - CENTREX (Louisiana SQM)
  - ISDN (Louisiana SQM) (NOTE: ISDN included in POTS for Georgia Only)
  - ESSX (Louisiana SQM)
- Unbundled Network Elements
  - UNE Design
  - UNE Non – Design
  - UNE 2 Wire Loop (Louisiana SQM)
  - UNE Loop Other (Louisiana SQM)
  - Unbundled Ports (Louisiana SQM)
- Trunks
  - Local Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

The following measure is the exception for all states:  
Coordinated Customer Conversion

Which is disaggregated as follows:  
UNE LOOPS with INP  
UNE LOOPS without INP

## PROVISIONING

<b>Report/Measurement:</b>
<b>P-1. Mean Held Order Interval &amp; Distribution Intervals</b>
<b>Definition:</b>
When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders.
<b>Exclusions:</b>
Order Activities of BST associated with internal or administrative use of local services.
<b>Business Rules:</b>
<p><b>Mean Held Order Interval:</b> This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval. The interval is by calendar days with no exclusions for Holidays or Sundays.</p> <p>CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.</p> <p><b>Held Order Distribution Interval:</b> This measure provides data to report total days held and identifies these in categories of &gt;15 days and &gt; 90 days. (orders counted in &gt;90 days are also included in &gt;15 days).</p>
<b>Calculation:</b>
<p><b>Mean Held Order Interval:</b></p> $\Sigma(\text{Reporting Period Close Date} - \text{Committed Order Due Date}) / (\text{Number of Orders Pending and Past The Committed Due Date})$ <p>for all orders pending and past the committed due date.</p> <p><b>Held Order Distribution Interval:</b></p> $(\# \text{ of Orders Held for } \geq 90 \text{ days}) / (\text{Total } \# \text{ of Orders Pending But Not Completed}) \times 100$ $(\# \text{ of Orders Held for } \geq 15 \text{ days}) / (\text{Total } \# \text{ of Orders Pending But Not Completed}) \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>
<b>Level of Disaggregation:</b>
Circuit breakout < 10, > = 10

**PROVISIONING - Mean Held Order Interval & Distribution Intervals – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON (PON)</li> <li>• Order Submission Date (TICKET_ID)</li> <li>• Committed Due Date (DD)</li> <li>• Service Type(CLASS_SVC_DESC)</li> <li>• Hold Reason</li> <li>• Total line/circuit count</li> <li>• Geographic Scope</li> </ul> <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date</li> <li>• Committed Due Date</li> <li>• Service Type</li> <li>• Hold Reason</li> <li>• Total line/circuit count</li> <li>• Geographic Scope</li> </ul>
<b>Retail Analog/Benchmark:</b> CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-(See Appendix D)	

Revision Date: 02/24/00 (tar)

## PROVISIONING

<b>Report/Measurement:</b>	
<b>P-2. Average Jeopardy Notice Interval &amp; Percentage of Orders Given Jeopardy Notices</b>	
<b>Definition:</b>	
When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Orders held for CLEC end user reasons</li> <li>• Orders submitted to BST through non-mechanized methods</li> </ul>	
<b>Business Rules:</b>	
When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.	
<b>Calculation:</b>	
<p><b>Average Jeopardy Interval</b> = <math>\Sigma [(\text{Date and Time of Scheduled Due Date on Service Order}) - (\text{Date and Time of Jeopardy Notice})] / [\text{Number of Orders Notified of Jeopardy in Reporting Period}]</math>.</p> <p><b>Percent of Orders Given Jeopardy Notice</b> = <math>\Sigma [(\text{Number of Orders Given Jeopardy Notices in Reporting Period}) / (\text{Number of Orders Confirmed (due) in Reporting Period})]</math></p>	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON</li> <li>• Date and Time Jeopardy Notice sent</li> <li>• Committed Due Date</li> <li>• Service Type</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Date and Time Jeopardy Notice sent</li> <li>• Committed Due Date</li> <li>• Service type</li> </ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
95% > = 24 hours	

Revision Date: 01/05/00 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>	
<b>P-3. Percent Missed Installation Appointments</b>	
<b>Definition:</b>	
"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>• Canceled Service Orders</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li><li>• Disconnect (D) &amp; From (F) orders</li><li>• End User Misses on Interconnection Trunks</li></ul>	
<b>Business Rules:</b>	
Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the confirmed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.	
<b>Calculation:</b>	
$\text{Percent Missed Installation Appointments} = \frac{\sum (\text{Number of Orders Not Complete by Committed Due Date in Reporting Period})}{(\text{Number of Orders Confirmed in Reporting Period})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul> <p><b>Report explanation:</b> The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user. The End User MA represents the percentage of orders missed by the CLEC or their end user.</p>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Reported in categories of &lt;10 lines/circuits; &gt;= 10 lines/circuits</li><li>• Dispatch/No Dispatch</li></ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• CLEC Order Number and PON (PON)</li><li>• Committed Due Date (DD)</li><li>• Completion Date (CMPLTN DD)</li><li>• Status Type</li><li>• Status Notice Date</li><li>• Standard Order Activity</li><li>• Geographic Scope</li></ul>	<ul style="list-style-type: none"><li>• Report Month</li><li>• BST Order Number</li><li>• Committed Due Date (DD)</li><li>• Completion Date (CMPLTN DD)</li><li>• Status Type</li><li>• Status Notice Date</li><li>• Standard Order Activity</li><li>• Geographic Scope</li></ul>
<b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs-(See Appendix D)	

Revision Date: 02/28/00 (taf)

**PROVISIONING**

<b>Report/Measurement :</b>
<b>P-4. Average Completion Interval (OCI) &amp; Order Completion Interval Distribution</b>
<b>Definition:</b> The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.
<b>Exclusions:</b> <ul style="list-style-type: none"><li>• Canceled Service Orders</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li><li>• D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).</li><li>• "L" Appointment coded orders (where the customer has requested a later than offered interval)</li></ul>
<b>Business Rules:</b> The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when BST issues a FOC or SOCS date time stamp receipt of an order from the CLEC to BST's actual order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed.  The interval breakout for UNE and Design is: 0-5 = 0-4.99, 5-10 = 5-9.99, 10-15 = 10-14.99, 15-20 = 15-19.99 20-25 = 20-24.99, 25-30 = 25-29.99, >=30 = 30 and greater.
<b>Calculation :</b>
<b>Average Completion Interval:</b> $\Sigma [ (\text{Completion Date \& Time}) - (\text{Order Issue Date \& Time}) ] / \Sigma (\text{Count of Orders Completed in Reporting period})$
<b>Order Completion Interval Distribution:</b> $\Sigma (\text{Service Orders Completed in "X" days}) / (\text{Total Service Orders Completed in Reporting Period}) \times 100$
<b>Report Structure:</b> <ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>
<b>Level of Disaggregation:</b> <ul style="list-style-type: none"><li>• ISDN Orders included in Non Design - GA Only</li><li>• Dispatch/No Dispatch categories applicable to all levels except trunks.</li><li>• Residence &amp; Business reported in day intervals = 0,1,2,3,4, 5, 5+</li><li>• UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, &gt;=30</li><li>• All Levels are reported &lt;10 line/circuits; &gt;=10 line/circuits</li></ul>

**PROVISIONING –**

**(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Company Name</li> <li>• Order Number (PON)</li> <li>• Submission Date &amp; Time (TICKET_ID)</li> <li>• Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Geographic Scope</li> </ul> <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date &amp; Time</li> <li>• Order Completion Date &amp; Time</li> <li>• Service Type</li> <li>• Geographic Scope</li> </ul>
<b>Retail Analog/Benchmark</b>	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs-(See Appendix D)	

Revision Date: 02/28/00 (taf)



**PROVISIONING**

<b>Report/Measurement:</b>	
<b>P-5. Average Completion Notice Interval</b>	
<b>Definition:</b>	
The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Non-mechanized Orders</li> <li>• Cancelled Service Orders</li> <li>• Order Activities of BST associated with internal or administrative use of local services</li> <li>• D &amp; F orders</li> </ul>	
<b>Business Rules:</b>	
Measurement of interval of completion date and time by a field technician on dispatched orders, and 5PM start time on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. The field technician notifies the CLEC the work was complete and then he enters the completion time stamp information in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically. The start time is the completion stamp either by the field technician or the 5PM due date stamp; the end time is the time stamp the notice was submitted to the CLEC/BST system.	
<b>Calculation:</b>	
$\frac{\Sigma (\text{Date and Time of Notice of Completion}) - (\text{Date and Time of Work Completion})}{(\text{Number of Orders Completed in Reporting Period})}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, &gt; 24, plus Overall Average Hour Interval</li> <li>• Reported in categories of &lt;10 line/circuits; &gt;= 10 line/circuits</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Work Completion Date</li> <li>• Work Completion Time</li> <li>• Completion Notice Availability Date</li> <li>• Completion Notice Availability Time</li> <li>• Service Type</li> <li>• Activity Type</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Work Completion Date</li> <li>• Work Completion Time</li> <li>• Completion Notice Availability Date</li> <li>• Completion Notice Availability Time</li> <li>• Service Type</li> <li>• Activity Type</li> <li>• Geographic Scope</li> </ul>
<b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.	<b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.
<b>Retail Analog/Benchmark:</b>	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs – (See Appendix D)	

Revision Date 02/24/00 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>	
<b>P-6. Coordinated Customer Conversions</b>	
<b>Definition:</b>	
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without INP, and where the CLEC has requested BST to provide a coordinated cutover.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>Any order canceled by the CLEC will be excluded from this measurement.</li><li>Delays due to CLEC following disconnection of the unbundled loop</li><li>Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested.</li></ul>	
<b>Business Rules:</b>	
Where the service order includes INP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.	
<b>Calculation:</b>	
$\Sigma [(Completion\ Date\ and\ Time\ for\ Cross\ Connection\ of\ an\ Coordinated\ Unbundled\ Loop) - (Disconnection\ Date\ and\ Time\ of\ an\ Coordinated\ Unbundled\ Loop)] / Total\ Number\ of\ Unbundled\ Loop\ with\ Coordinated\ Conversions\ (items)\ for\ the\ reporting\ period.$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>CLEC Specific</li><li>CLEC Aggregate</li></ul>	
<b>Level of Disaggregation:</b>	
Reported in intervals <=5 minutes; >5, <=15 minutes; >15 minutes, plus Overall Average interval	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>Report Month</li><li>CLEC Order Number</li><li>Committed Due Date (DD)</li><li>Service Type (CLASS_SVC_DESC)</li><li>Cutover Start Time</li><li>Cutover Completion time</li><li>Portability start and completion times (INP orders)</li><li>Total Conversions (Items)</li></ul> <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"><li>No BST Analog Exists</li></ul>
<b>Retail Analog/Benchmark:</b>	
There is no retail analog for this measurement because it measures cutting loops to the CLEC. Benchmark – See Appendix D	

Revision Date: 02/28/00 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>	
<b>P-7. % Provisioning Troubles within 30 days of Service Order Activity</b>	
<b>Definition:</b>	
Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)</li> <li>• D &amp; F orders</li> </ul>	
<b>Business Rules:</b>	
Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report.	
D & F orders are excluded as there is no subsequent activity following a disconnect.	
<b>Calculation:</b>	
$\% \text{ Provisioning Troubles within 30 days of Service Order Activity} = \frac{\sum (\text{Trouble reports on all completed orders} \leq 30 \text{ days following service order(s) completion})}{(\text{All Service Orders completed in the report calendar month})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Reported in categories of &lt;10 line/circuits; <math>\geq</math> 10 line/circuits</li> <li>• Dispatch / No Dispatch</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON</li> <li>• Order Submission Date(TICKET_ID)</li> <li>• Order Submission Time (TICKET_ID)</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date</li> <li>• Order Submission Time</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks -BST UNEs-(See Appendix D)	

Revision Date: 02/28/00 (taf)

**PROVISIONING**

<b>Report/Measurement :</b>	
<b>P-8. Total Service Order Cycle Time (TSOCT)</b>	
<b>Definition:</b>	
This report measures the total service order cycle time from receipt of a valid service order request to the completion of the service order.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li> <li>• D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).</li> <li>• "L" Appointment coded orders (where the customer has requested a later than offered interval)</li> <li>• Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.</li> </ul>	
<b>Business Rules:</b>	
The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval.	
This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed.	
<b>Calculation :</b>	
<b>Total Service Order Cycle Time</b> $\frac{\sum (\text{Date and Time of Service Request Receipt}) - (\text{Completion Date and Time of Service Order}) (\text{SOCS HIST-CD DATE})}{(\text{Count of Orders Completed in Reporting Period})}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Reported in categories of &lt; 10 line/circuits; &gt; = 10 line/circuits</li> <li>• Dispatch/No Dispatch categories applicable to all levels except trunks.</li> <li>• Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, &gt; = 30 Days</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Interval for FOC</li> <li>• CLEC Company Name</li> <li>• Order Number (PON)</li> <li>• Submission Date &amp; Time (TICKET_ID)</li> <li>• Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date &amp; Time</li> <li>• Order Completion Date &amp; Time</li> <li>• Service Type</li> <li>• Geographic Scope</li> </ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark</b>	
See Appendix D	

Revision Date: 02/28/00 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>	
<b>P-9. Service Order Accuracy <u>GEORGIA ONLY</u></b>	
<b>Definition:</b>	
The "service order accuracy" measurement measures the accuracy and completeness of BST service orders by comparing what was ordered and what was completed.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>• Cancelled Service Orders</li><li>• Order Activities of BST associated with internal or administrative use of local services</li><li>• &amp; F orders</li></ul>	
<b>Business Rules:</b>	
A manual sampling of service orders, completed during a monthly reporting period, is compared to the original account profile and the order that the CLEC sent to BST. An order is "completed without error" if all service attributes and account detail changes (as determined by comparing the original order) completely and accurately reflect the activity specified on the original order and any supplemental CLEC order.	
<b>Calculation:</b>	
Percent Service Order Accuracy = $\Sigma (\text{Orders Completed without Error}) / \Sigma (\text{Orders Completed in Reporting Period}) \times 100$	
<b>Report Structure:</b>	
CLEC Aggregate	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Reported in categories of &lt;10 line/circuits; &gt;= 10 line/circuits</li><li>• Dispatch / No Dispatch</li></ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• CLEC Order Number and PON</li><li>• Local Service Request (LSR)</li><li>• Order Submission Date</li><li>• Committed Due Date</li><li>• Service Type</li><li>• Standard Order Activity</li></ul>	<ul style="list-style-type: none"><li>• Being investigated at this time</li></ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b> (Under Investigation)	

Revision Date: 01/05/00 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>
<b>LNP – 10. Percent Missed Installation Appointments</b>
<b>Definition:</b>
Percent Missed Installation Appointments monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Canceled Service Orders</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.</li></ul>
<b>Business Rules:</b>
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported in a separate category. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
<b>Calculation:</b>
<b>Percent Missed Installation Appointments:</b> [ (Number of Orders Not Completed by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period)] X 100
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Mechanized (service orders generated by LSRs submitted via EDI or TAG)</li><li>• CLEC Specific</li><li>• CLEC Aggregate</li></ul> <p><b>Report explanation:</b> Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the result of BST caused misses.</p>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• Product Reporting Levels<ul style="list-style-type: none"><li>➢ LNP</li><li>➢ UNE Loop Associated w/LNP</li></ul></li><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ State, Region</li></ul></li></ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

Revision Date: 02/16/00 (taf)

**PROVISIONING – (LNP)**

<b>Report/Measurement :</b>
<b>LNP-11. Average Disconnect Timeliness Interval &amp; Disconnect Timeliness Interval Distribution</b>
<b>Definition:</b> Disconnect Timeliness is defined as the interval between the time the LNP Gateway receives the 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time that the Disconnect service order for an LSR is completed in SOCS. This interval effectively measures BST responsiveness by isolating it from impacts that are caused by CLEC related activities.
<b>Exclusions:</b> <ul style="list-style-type: none"><li>• Canceled Service Orders</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.</li></ul>
<b>Business Rules:</b> The Disconnect Timeliness interval is determined for the last Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the last 'Number Ported' message for an LSR from NPAC (signifying the CLEC 'Activate') until the last Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed.
<b>Calculation :</b> <b>Average Disconnect Timeliness Interval:</b> $\frac{\sum [(\text{Disconnect Service Order Completion Date \& Time}) - (\text{'Number Ported' Message Received Date \& Time})]}{\sum (\text{Total Number of Disconnect Service Orders Completed in Reporting Period})}$ <b>Disconnect Timeliness Interval Distribution:</b> $[\sum (\text{Disconnect Service Orders Completed in "X" days}) / (\text{Total Disconnect Service Orders Completed in Reporting Period})] \times 100$
<b>Report Structure:</b> <ul style="list-style-type: none"><li>• Mechanized (service orders generated by LSRs submitted via EDI or TAG)</li><li>• CLEC Specific</li><li>• CLEC Aggregate</li></ul>
<b>Level of Disaggregation:</b> <ul style="list-style-type: none"><li>• Reported in day intervals = 0,1,2,3,4, 5, &gt;5 days</li><li>• Product Reporting Levels<ul style="list-style-type: none"><li>➢ LNP</li></ul></li><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ State, Region</li></ul></li></ul>
<b>Retail Analog/Benchmark:</b> See Appendix D

Revision Date: 02/16/00 (taf)

**PROVISIONING**

<b>Report/Measurement :</b>
<b>LNP-12. Total Service Order Cycle Time</b>
<b>Definition:</b>
Total Service Order Cycle Time measures the interval from receipt of a valid service order request to the completion of the final service order associated with that service request.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Canceled Service Orders</li><li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable</li><li>• "L" appointment coded orders (indicating the customer has requested a later than offered interval)</li><li>• "S" missed appointment coded orders (indicating subscriber missed reasons), except for "SP" codes (indicating subscriber prior due date requested).</li></ul>
<b>Business Rules:</b>
The interval is determined for each service request processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval.  This interval starts with the receipt of a valid service request and stops when the technician or system completes all the related service orders for the LSR in SOCS. Elapsed time for each service request is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of service requests completed to produce the total service order cycle time.
<b>Calculation :</b>
<b>Average Total Service Order Cycle Time:</b> $\frac{\sum (\text{Service Order Completion Date \& Time}) - (\text{Service Request Receipt Date \& Time})}{\sum (\text{Total Number Service Requests Completed in Reporting Period})}$ <b>Total Service Order Cycle Time Interval Distribution:</b> $[\sum (\text{Total Number of Service Requests Completed in "X" minutes/hours}) / (\text{Total Number of Service Requests Received in Reporting Period})] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Mechanized (service orders generated by LSRs submitted via EDI or TAG)</li><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• "W" Appointment Code Only (Company Offered)</li></ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• Reported in day intervals 0 - 5, 5 - 10, 10 - 15, 15 - 20, 20 - 25, 25 - 30, ≥30 days</li><li>• Product Reporting Levels<ul style="list-style-type: none"><li>➢ LNP</li><li>➢ UNE Loop with LNP</li></ul></li><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ State, Region</li></ul></li></ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

Revision Date: 02/16/00 (taf)



## Maintenance and Repair Level of Disaggregation

### Product Reporting Levels

- Resale / Retail
  - Pots – Residence
  - Pots – Business
  - PBX (Louisiana SQM)
  - ESSX (Louisiana SQM)
  - CENTREX (Louisiana SQM)
  - ISDN (Louisiana SQM) (NOTE: ISDN Troubles included in Non-Design Georgia Only)
  - Design
- Unbundled Network Elements
  - UNE Design
  - UNE Non – Design
  - UNE 2 Wire Loop (Louisiana SQM)
  - UNE Loop Other (Louisiana SQM)
  - Unbundled Ports (Louisiana SQM)
  - UNE Other Non – Design (Louisiana SQM)
- Trunks
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope

- State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
<b>M&amp;R-1. Missed Repair Appointments</b>	
<b>Definition:</b>	
The percent of trouble reports not cleared by the committed date and time.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>• Trouble tickets canceled at the CLEC request.</li><li>• BST trouble reports associated with internal or administrative service.</li><li>• <u>Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.</u></li></ul>	
<b>Business Rules:</b>	
The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.	
<b>Calculation:</b>	
Percentage of Missed Repair Appointments = $\frac{\Sigma (\text{Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time})}{\Sigma (\text{Total Trouble reports closed in Reporting Period})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• CLEC Company Name</li><li>• Submission Date &amp; Time (TICKET_ID)</li><li>• Completion Date (CMPLTN_DT)</li><li>• Service Type (CLASS_SVC_DESC)</li><li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li><li>• Geographic Scope</li></ul>	<ul style="list-style-type: none"><li>• Report Month</li><li>• BST Company Code</li><li>• Submission Date &amp; Time</li><li>• Completion Date</li><li>• Service Type</li><li>• Disposition and Cause (Non-Design /Non-Special Only)</li><li>• Trouble Code (Design and Trunking Services)</li><li>• Geographic Scope</li></ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark</b>	
CLEC Residence-Resale / BST Residence-Retail CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex, and ISDN Resale/ BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNEs = (See Appendix D)	

Revision Date: 02/22/00 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
<b>M&amp;R-2. Customer Trouble Report Rate</b>	
<b>Definition:</b>	
Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/ circuits in service.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>• Trouble tickets canceled at the CLEC request.</li><li>• BST trouble reports associated with administrative service.</li><li>• Customer provided Equipment (CPE) troubles or CLEC equipment troubles.</li></ul>	
<b>Business Rules:</b>	
Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination that exist for the CLEC's and BST respectively at the end of the report month.	
<b>Calculation:</b>	
Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• CLEC Company Name</li><li>• Ticket Submission Date &amp; Time (TICKET_ID)</li><li>• Ticket Completion Date (CMPLTN_DT)</li><li>• Service Type (CLASS_SVC_DESC)</li><li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li><li>• # Service Access Lines in Service at the end of period</li><li>• Geographic Scope</li></ul>	<ul style="list-style-type: none"><li>• Report Month</li><li>• BST Company Code</li><li>• Ticket Submission Date &amp; Time</li><li>• Ticket Completion Date</li><li>• Service Type</li><li>• Disposition and Cause (Non-Design / Non-Special Only)</li><li>• Trouble Code (Design and Trunking Services)</li><li>• # Service Access Lines in Service at the end of period</li><li>• Geographic Scope</li></ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence-Resale / BST Residence -Retail CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale/ BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNEs - (See Appendix D)	

Revision Date: 02/22/00 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
<b>M&amp;R-3. Maintenance Average Duration</b>	
<b>Definition:</b>	
The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble reports canceled at the CLEC request</li> <li>• BST trouble reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.</li> <li>• Trouble reports greater than 10 days</li> </ul>	
<b>Business Rules:</b>	
For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored and the customer notified (when the technician completes the trouble ticket on his/her CAT or work system).	
NOTE: Customer can be BST or CLEC	
<b>Calculation:</b>	
Maintenance Average Duration = $\Sigma(\text{Date and Time of Service Restoration}) - (\text{Date and Time Trouble Ticket was Opened}) / \Sigma(\text{Total Closed Troubles in the reporting period})$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• BST Aggregate</li> <li>• CLEC Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets (LINE_NBR)</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TIME_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket submission Time</li> <li>• Ticket completion Date</li> <li>• Ticket Completion Time</li> <li>• Total Duration Time</li> <li>• Service Type</li> <li>• Disposition and Cause (Non = Design /Non-Special Only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence-Resale / BST Residence-Resale CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale /BST Trunking-Retail UNEs – (See Appendix D)	

Revision Date: 02/22/00 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
<b>M&amp;R-4. Percent Repeat Troubles within 30 Days</b>	
<b>Definition:</b>	
Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble Reports canceled at the CLEC request</li> <li>• BST Trouble Reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.</li> </ul>	
<b>Business Rules:</b>	
Includes Customer trouble reports received within 30 days of an original Customer trouble report.	
<b>Calculation:</b>	
Percent Repeat Troubles within 30 Days = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / ( Total Trouble Reports Closed in Reporting Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets (LINE_NBR)</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TICKET_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT)</li> <li>• Service Type</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Date</li> <li>• Ticket Completion Time</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days</li> <li>• Service Type</li> <li>• Disposition and Cause (Non – Design/Non-Special only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
NOTE: Code parentheses is the corresponding header format found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence-Resale / BST Residence-Retail CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNEs – Retail Analog (See Appendix D)	

Revision date: 02/22/00 (see)

**MANTENANCE & REPAIR**

<b>Report/Measurement:</b>	
<b>M&amp;R-5. Out of Service (OOS) &gt; 24 Hours</b>	
<b>Definition:</b>	
For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of troubles cleared in excess of 24 hours. (All design services are considered to be out of service).	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble Reports canceled at the CLEC request</li> <li>• BST Trouble Reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.</li> </ul>	
<b>Business Rules:</b>	
Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS and the trouble is counted if the time exceeds 24 hours.	
<b>Calculation:</b>	
Out of Service (OOS) > 24 hours = ( Total Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• BST Aggregate</li> <li>• CLEC Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TICKET_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Percentage of Customer Troubles out of Service &gt; 24 Hours (OOS&gt;24_FLAG)</li> <li>• Service type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE-DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission time</li> <li>• Ticket Completion Date</li> <li>• Ticket Completion Time</li> <li>• Percent of Customer Troubles out of Service &gt; 24 Hours</li> <li>• Service type</li> <li>• Disposition and Cause (Non – Design/Non-Special only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
CLEC Residence-Resale / BST Residence- Retail CLEC Business- Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale /BST Trunking- Retail UNEs Retail Analog – (See Appendix D)	

Revision Date: 02/22/00 (see)

## MAINTENANCE & REPAIR

<b>Report/Measurement:</b>	
<b>M&amp;R-6. Average Answer Time -- Repair Centers</b>	
<b>Definition:</b>	
This measures the average time a customers is in Que.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call.	
(NOTE: The Column is a combined BST Residence and Business number)	
<b>Level of Disaggregation:</b>	
Region. <u>CLEC/BST Service Centers</u> and <u>BST Repair Centers</u> are regional.	
<b>Calculation:</b>	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>CLEC Aggregate</li> <li>BST Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>CLEC Average Answer Time</li> </ul>	<ul style="list-style-type: none"> <li>BST Average Answer Time</li> </ul>
<b>Retail Analog/Benchmark:</b>	
For CLEC, Average Answer Times in UNE Center and BRMC are comparable to the Average Answer Times in the BST Repair Centers. See Appendix D	

Revision Date: 02/22/00 (see)



**BILLING**

<b>Report/Measurement:</b>	
<b>B-1. Invoice Accuracy</b>	
<b>Definition:</b>	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)</li> </ul>	
<b>Business Rules:</b>	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers BST. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
<b>Calculation:</b>	
$\text{Invoice Accuracy} = (\text{Total Billed Revenues during current month}) - (\text{Billing Related Adjustments during current month}) / \text{Total Billed Revenues during current month} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>CLEC Specific</li> <li>CLEC Aggregate</li> <li>BST Aggregate</li> </ul>	
<b>Level of Disaggregation :</b>	
<ul style="list-style-type: none"> <li>Product / Invoice Type <ul style="list-style-type: none"> <li>Resale</li> <li>UNE</li> <li>Interconnection</li> </ul> </li> <li>Geographic Scope <ul style="list-style-type: none"> <li>Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>Report Month</li> <li>Invoice Type</li> <li>Total Billed Revenue</li> <li>Billing Related Adjustments</li> </ul>	<ul style="list-style-type: none"> <li>Report Month</li> <li>Retail Type <ul style="list-style-type: none"> <li>CRIS</li> <li>CABS</li> </ul> </li> <li>Total Billed Revenue</li> <li>Billing Related Adjustments</li> </ul>
<b>Retail Analog/Benchmark</b>	
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy See Appendix D	

Revision Date: 02/28/00 (dg)

## BILLING

<b>Report/Measurement:</b>	
<b>B-2. Mean Time to Deliver Invoices</b>	
<b>Definition:</b>	
This measure provides the mean interval for billing invoices	
<b>Exclusions:</b>	
Any invoices rejected due to formatting or content errors.	
<b>Business Rules:</b>	
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
<b>Calculation:</b>	
Mean Time To Deliver Invoices $\hat{=}$ $\sum [(Invoice\ Transmission\ Date) - (Close\ Date\ of\ Scheduled\ Bill\ Cycle)] / (Count\ of\ Invoices\ Transmitted\ in\ Reporting\ Period)$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Product / Invoice Type <ul style="list-style-type: none"> <li>➢ Resale</li> <li>➢ UNE</li> <li>➢ Interconnection</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Invoice Type</li> <li>• Invoice Transmission Count</li> <li>• Date of Scheduled Bill Close</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Retail Type <ul style="list-style-type: none"> <li>➢ CRIS</li> <li>➢ CABS</li> </ul> </li> <li>• Invoice Transmission Count</li> <li>• Date of Scheduled Bill Close</li> </ul>
<b>Retail Analog/Benchmark:</b>	
<p>CRIS-based invoices will be released for delivery within six (6) business days</p> <p>CABS-based invoices will be released for delivery within eight (8) calendar days.</p> <p>CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery for both systems.</p> <p>See Appendix D</p>	

Revision Date: 02/28/00 (dg)

**BILLING**

<b>Report/Measurement:</b>	
<b>B-3. Usage Data Delivery Accuracy</b>	
<b>Definition:</b>	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
<b>Calculations:</b>	
$\text{Usage Data Delivery Accuracy} = \frac{\Sigma[(\text{Total number of usage data packs sent during current month}) - (\text{Total number of usage data packs requiring retransmission during current month})]}{(\text{Total number of usage data packs sent during current month})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ Region</li></ul></li></ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• Record Type<ul style="list-style-type: none"><li>➢ BellSouth Recorded</li><li>➢ Non BellSouth Recorded</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Report Month</li><li>• Record Type</li></ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy See Appendix D	

Revision Date: 02/28/00 (dg)

**BILLING**

<b>Report/Measurement:</b>	
<b>B-4. Usage Data Delivery Completeness</b>	
<b>Definition:</b>	
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
Usage Data Delivery Completeness = $\Sigma(\text{Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date}) / \Sigma(\text{Total number of Recorded usage records delivered during the current month}) \times 100$	
<b>Report Structure</b>	
<ul style="list-style-type: none"><li>• CLEC Specific</li><li>• CLEC Aggregate</li><li>• BST Aggregate</li></ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ Region</li></ul></li></ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• Record Type<ul style="list-style-type: none"><li>➢ BellSouth Recorded</li><li>➢ Non BellSouth Recorded</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Report Monthly</li><li>• Record Type</li></ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Delivery Completeness is comparable to BST Usage Delivery Completeness See Appendix D	

Revision Date: 02/28/00 (dg)

**BILLING**

<b>Report/Measurement:</b>	
<b>B-5. Usage Data Delivery Timeliness</b>	
<b>Definition:</b>	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
$\text{Usage Data Delivery Timeliness} = \frac{\Sigma(\text{Total number of usage records sent within six (6) calendar days from initial recording/receipt})}{\Sigma(\text{Total number of usage records sent})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Aggregate</li><li>• CLEC Specific</li><li>• BST Aggregate</li></ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ Region</li></ul></li></ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• Record Type<ul style="list-style-type: none"><li>➢ BellSouth Recorded</li><li>➢ Non-BellSouth Recorded</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Report Monthly</li><li>• Record Type</li></ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Data Delivery Timeliness is comparable to BST Usage Data Delivery Timeliness See Appendix D	

Revision date: 02/28/00 (dg)

**BILLING**

<b>Report/Measurement:</b>	
<b>B-6. Mean Time to Deliver Usage</b>	
<b>Definition:</b>	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
Mean Time to Deliver Usage = $\Sigma$ (Record volume X estimated number of days to deliver the Usage Record) / total record volume	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• CLEC Aggregate</li><li>• CLEC Specific</li><li>• BST Aggregate</li></ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"><li>• Geographic Scope<ul style="list-style-type: none"><li>➢ Region</li></ul></li></ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• Record Type<ul style="list-style-type: none"><li>➢ BellSouth Recorded</li><li>➢ Non-BellSouth Recorded</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Report Monthly</li><li>• Record Type</li></ul>
<b>Retail Analog/Benchmark:</b>	
Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST See Appendix D	

Revision Date: 02/28/00 (dg)

**OPERATOR SERVICES**

<b>Report/Measurement:</b>
<b>OS-1. Speed to Answer Performance/Average Speed to Answer – Toll</b>
<b>Definition:</b>
Measurement of the average time in seconds calls wait before answered by a toll operator.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of BST and CLECs<ul style="list-style-type: none"><li>State</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. <ul style="list-style-type: none"><li>Month</li><li>Call Type (Toll)</li><li>Average Speed of Answer</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

**OPERATOR SERVICES**

<b>Report/Measurement:</b>
<b>OS-2. Speed to Answer Performance/Percent Answered within "X" Seconds – Toll</b>
<b>Definition:</b>
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of BST and CLECs<ul style="list-style-type: none"><li>State</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. <ul style="list-style-type: none"><li>Month</li><li>Call Type (Toll)</li><li>Average Speed of Answer</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)



**OPERATOR SERVICES**

<b>Report/Measurement:</b>
<b>OS-3. Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)</b>
<b>Definition:</b>
Measurement of the average time in seconds calls wait before answer by a DA operator.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within “X” seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The “total call waiting seconds” is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The “total calls served” is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of BST and CLECs<ul style="list-style-type: none"><li>State</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST’s Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. <ul style="list-style-type: none"><li>Month</li><li>Call Type (DA)</li><li>Average Speed of Answer</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

**OPERATOR SERVICES**

<b>Report/Measurement:</b>
<b>OS-4. Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)</b>
<b>Definition:</b>
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of BST and CLECs<ul style="list-style-type: none"><li>State</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. <ul style="list-style-type: none"><li>Month</li><li>Call Type (DA)</li><li>Average Speed of Answer</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

E911

<b>Report/Measurement:</b>
<b>E-1. Timeliness</b>
<b>Definition:</b>
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>Any resale order canceled by a CLEC</li><li>Facilities-based CLEC orders</li></ul>
<b>Business Rules:</b>
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$\text{E911 Timeliness} = \Sigma (\text{Number of batch orders processed within 24 hours} \div \text{Total number of batch orders submitted}) \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of CLEC resale updates and BST retail updates<ul style="list-style-type: none"><li>State</li><li>Region</li></ul></li></ul>
<b>Levels of Disaggregation:</b>
None
<b>Data Retained</b>
<ul style="list-style-type: none"><li>Report month</li><li>Aggregate data</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

**E911**

<b>Report/Measurement:</b>
<b>E-2. Accuracy</b>
<b>Definition:</b>
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>Any resale order canceled by a CLEC</li><li>Facilities-based CLEC orders</li></ul>
<b>Business Rules:</b>
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$\text{E911 Accuracy} = \frac{\text{Number of record individual updates processed with no errors}}{\text{Total number of individual record updates}} \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of CLEC resale updates and BST retail updates<ul style="list-style-type: none"><li>State</li><li>Region</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained</b>
<ul style="list-style-type: none"><li>Report month</li><li>Aggregate data</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design
See Appendix D

Revision Date: 02/28/00 (tg)

**E911**

<b>Report/Measurement:</b>
<b>E-3. Mean Interval</b>
<b>Definition:</b>
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>Any resale order canceled by a CLEC</li><li>Facilities-based CLEC orders</li></ul>
<b>Business Rules:</b>
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$E911 \text{ Mean Interval} = \Sigma (\text{Date and time of batch order completion} - \text{Date and time of batch order submission}) \div (\text{Number of batch orders completed})$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>Reported for the aggregate of CLEC resale updates and BST retail updates<ul style="list-style-type: none"><li>State</li><li>Region</li></ul></li></ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
<ul style="list-style-type: none"><li>Report month</li><li>Aggregate data</li></ul>
<b>Retail Analog/Benchmark</b>
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

## TRUNK GROUP PERFORMANCE

<b>Report/Measurement:</b>															
<b>TGP-1. Trunk Group Performance-Aggregate</b>															
<b>Definition:</b>															
A report of aggregate blocking information for CLEC trunk groups and BellSouth trunk groups.															
<b>Exclusions:</b>															
<ul style="list-style-type: none"> <li>Trunk Groups for which valid data is not available for an entire study period</li> <li>Duplicate trunk group information</li> </ul>															
<b>Business Rules:</b>															
<ul style="list-style-type: none"> <li>Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.</li> <li>For each geographic area, plots are generated for: a) the monthly blocking by hour for each affecting group (BellSouth or CLEC), and b) the difference between BellSouth blocking data and CLEC blocking data is calculated and plotted.</li> <li>The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.</li> <li>Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for two aggregate groups of selected trunk groups. These groups are CLEC affecting and BellSouth affecting trunk groups. In order to assign trunk groups to each aggregate group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups so that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows:</li> </ul>															
<b>CLEC Affecting Categories:</b>															
	<table> <tr> <th><u>Point A</u></th><th><u>Point B</u></th></tr> <tr> <td>Category 1: BellSouth End Office</td><td>BellSouth Access Tandem</td></tr> <tr> <td>Category 3: BellSouth End Office</td><td>CLEC Switch</td></tr> <tr> <td>Category 4: BellSouth Local Tandem</td><td>CLEC Switch</td></tr> <tr> <td>Category 5: BellSouth Access Tandem</td><td>CLEC Switch</td></tr> <tr> <td>Category 10: BellSouth End Office</td><td>BellSouth Local Tandem</td></tr> <tr> <td>Category 16: BellSouth Tandem</td><td>BellSouth Tandem</td></tr> </table>	<u>Point A</u>	<u>Point B</u>	Category 1: BellSouth End Office	BellSouth Access Tandem	Category 3: BellSouth End Office	CLEC Switch	Category 4: BellSouth Local Tandem	CLEC Switch	Category 5: BellSouth Access Tandem	CLEC Switch	Category 10: BellSouth End Office	BellSouth Local Tandem	Category 16: BellSouth Tandem	BellSouth Tandem
<u>Point A</u>	<u>Point B</u>														
Category 1: BellSouth End Office	BellSouth Access Tandem														
Category 3: BellSouth End Office	CLEC Switch														
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Category 5: BellSouth Access Tandem	CLEC Switch														
Category 10: BellSouth End Office	BellSouth Local Tandem														
Category 16: BellSouth Tandem	BellSouth Tandem														
<b>BellSouth Affecting Category:</b>															
	<table> <tr> <th><u>Point A</u></th><th><u>Point B</u></th></tr> <tr> <td>Category 9: BellSouth End Office</td><td>BellSouth End Office</td></tr> </table>	<u>Point A</u>	<u>Point B</u>	Category 9: BellSouth End Office	BellSouth End Office										
<u>Point A</u>	<u>Point B</u>														
Category 9: BellSouth End Office	BellSouth End Office														

**TRUNK GROUP PERFORMANCE - (Trunk Group Performance-Aggregate – Continued)****Calculation:****Monthly Weighted Average Blocking:**

(Blocking data for each hour X number of valid measurement days within each week) /  $\Sigma$  (Total number of valid measurement days within each week)

Example:		Week 1	Week 2	Week 3	Week 4	Monthly
Hour						
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:

$$\frac{(1 \times 5) + (0.5 \times 5) + (2 \times 4) + (1.5 \times 4)}{(5 + 5 + 4 + 4)} = 1.2\%$$

**Aggregate Monthly Blocking:**

(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) /  $\Sigma$  (number of trunks in the aggregate group)

Example:	Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	.....	Blocking Hour 24
	A	24	3%	0%	1%	0%		0%
	B	144	2%	0%	1%	0.5%		0.5%
	C	528	0%	0.5%	1%	1%		1%
	D	316	1%	0%	1%	0.1%		0%
	E	940	1%	1%	4%	0%		0%
	Aggregate		0.8%	0.6%	2.4%	0.3%		0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:

$$\frac{(3 \times 24) + (2 \times 144) + (0 \times 528) + (1 \times 316) + (1 \times 940)}{(24 + 144 + 528 + 316 + 940)} = 0.8\%$$

The purpose of the Trunk Group Performance Report is to provide trunk blocking measurements on CLEC and BST trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

**Report Structure:**

- CLEC Aggregate
  - State

**Level of Disaggregation:**

Trunk Group

**Data Retained Relating to CLEC Experience**

- Report Month
- Total Trunk Groups
- Number of Trunk Groups by CLEC
- Hourly average blocking per trunk group

**Data Retained Relating to BST Experience**

- Report Month
- Total Trunk Groups
- Aggregate Hourly average blocking

**Retail Analog/Benchmark:**

Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BST.

Revision Date: 02/28/00 (tm)

**TRUNK GROUP PERFORMANCE**

<b>Report/Measurement:</b>		
<b>TGP-2. Trunk Group Performance-CLEC Specific</b>		
<b>Definition:</b>		
A report of blocking information for CLEC trunk groups.		
<b>Exclusions:</b>		
<ul style="list-style-type: none"><li>• Trunk Groups for which valid data is not available for an entire study period</li><li>• Duplicate trunk group information</li></ul>		
<b>Business Rules:</b>		
<ul style="list-style-type: none"><li>• Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.</li><li>• For each geographic area, plots are generated for the monthly blocking by hour</li><li>• The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.</li><li>• Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for CLEC trunk groups. In order to assign trunk groups to the CLEC group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups to that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows:</li></ul>		
<b>CLEC Affecting Categories:</b>		
	<b><u>Point A</u></b>	<b><u>Point B</u></b>
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 3:	BellSouth End Office	CLEC Switch
Category 4:	BellSouth Local Tandem	CLEC Switch
Category 5:	BellSouth Access Tandem	CLEC Switch
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem



**TRUNK GROUP PERFORMANCE - (Trunk Group Performance-CLEC Specific – Continued)****Calculation:****Monthly Weighted Average Blocking:**

(Blocking data for each hour X number of valid measurement days within each week) /  $\Sigma$  (Total number of valid measurement days within each week)

Example:		Week 1	Week 2	Week 3	Week 4	Monthly
Hour						
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	5
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:

$$\frac{(1 \times 5) + (0.5 \times 5) + (2 \times 4) + (1.5 \times 4)}{(5 + 5 + 4 + 4)} = 1.2\%$$

**Aggregate Monthly Blocking:**

(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) /  $\Sigma$  (number of trunks in the aggregate group)

Example:	Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	Blocking Hour 24
	A	24	3%	0%	1%	0%	0%
	B	144	2%	0%	1%	0.5%	0.5%
	C	528	0%	0.5%	1%	1%	1%
	D	316	1%	0%	1%	0.1%	0%
	E	940	1%	1%	4%	0%	0%
	Aggregate		0.8%	0.6%	2.4%	0.3%	0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:

$$\frac{(3 \times 24) + (2 \times 144) + (0 \times 528) + (1 \times 316) + (1 \times 940)}{(24 + 144 + 528 + 316 + 940)} = 0.8\%$$

The purpose of the Trunk Group Performance Report is to provide trunk blocking measurements on CLEC and BST trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

**Report Structure:**

- CLEC Specific
- Trunk Group

**Level of Disaggregation:**

Trunk Group

**Data Retained Relating to CLEC Experience**

- Report Month
- Total Trunk Groups
- Number of Trunk Groups by CLEC
- Hourly average blocking per trunk group

**Data Retained Relating to BST Experience**

- Report Month
- Total Trunk Groups
- Aggregate Hourly average blocking

**Retail Analog/Benchmark:**

Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BST.

Revision Date: 02/28/00 (tm)

## TRUNK GROUP PERFORMANCE

<b>Report/Measurement:</b>	
<b>TGP-3. Trunk Group Service Report</b>	
<b>Definition:</b>	
A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trunk groups for which valid traffic data is not available</li> <li>• High use trunk groups</li> </ul>	
<b>Business Rules:</b>	
Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.	
<b>Calculation:</b>	
Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• BST Aggregate <ul style="list-style-type: none"> <li>➢ CTTG</li> <li>➢ Local</li> </ul> </li> <li>• CLEC Aggregate <ul style="list-style-type: none"> <li>➢ BST Administered CLEC Trunk</li> <li>➢ CLEC Administered CLEC Trunk</li> </ul> </li> <li>• CLEC Specific <ul style="list-style-type: none"> <li>➢ BST Administered CLEC Trunk</li> <li>➢ CLEC Administered CLEC Trunk</li> </ul> </li> </ul>	
<b>Level of Disaggregation:</b>	
State	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Trunk Blockage/BST Trunk Blockage See Appendix D	

Revision Date: 02/28/00 (tm)

**TRUNK GROUP PERFORMANCE**

<b>Report/Measurement:</b>	
<b>TGP-4. Trunk Group Service Detail</b>	
<b>Definition:</b>	
A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"><li>• Trunk groups for which valid traffic data is not available</li><li>• High use trunk groups</li></ul>	
<b>Business Rules:</b>	
Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.	
<b>Calculation:</b>	
Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"><li>• BST Specific<ul style="list-style-type: none"><li>➤ Traffic Identity</li><li>➤ TGSN</li><li>➤ Tandem</li><li>➤ End Office</li><li>➤ Description</li><li>➤ Observed Blocking</li><li>➤ Busy Hour</li><li>➤ Number Trunks</li><li>➤ Valid study days</li><li>➤ Number reports</li><li>➤ Remarks</li></ul></li></ul>	<ul style="list-style-type: none"><li>• CLEC Specific<ul style="list-style-type: none"><li>➤ Traffic Identity</li><li>➤ TGSN</li><li>➤ Tandem</li><li>➤ CLEC POT</li><li>➤ Description</li><li>➤ Observed Blocking</li><li>➤ Busy Hour</li><li>➤ Number Trunks</li><li>➤ Valid study days</li><li>➤ Number reports</li><li>➤ Remarks</li></ul></li></ul>
<b>Level of Disaggregation:</b>	
State	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"><li>• Report month</li><li>• Total trunk groups</li><li>• Total trunk groups for which data is available</li><li>• Trunk groups with blocking greater than the MBT</li><li>• Percent of trunk groups with blocking greater than the MBT</li><li>• Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports</li></ul>	<ul style="list-style-type: none"><li>• Report month</li><li>• Total trunk groups</li><li>• Total trunk groups for which data is available</li><li>• Trunk groups with blocking greater than the MBT</li><li>• Percent of trunk groups with blocking greater than the MBT</li><li>• Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports</li></ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Trunk Blockage/BST Blockage	
See Appendix D	

Revision Date: 02/28/00 (tm)

**COLLOCATION**

<b>Report/Measurement:</b>
<b>C-1. Average Response Time</b>
<b>Definition:</b>
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Requests to augment previously completed arrangements</li><li>• Any application cancelled by the CLEC</li></ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
<b>Calculation:</b>
$\text{Average Response Time} = \frac{\sum(\text{Request Response Date}) - (\text{Request Submission Date})}{\text{Count of Responses Returned within Reporting Period}}$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Individual CLEC (alias) aggregate</li><li>• Aggregate of all CLECs</li></ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)</li><li>• Virtual</li><li>• Physical</li></ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"><li>• Report period</li><li>• Aggregate data</li></ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

Revision Date: 01/27/00 (tg)

**COLLOCATION**

<b>Report/Measurement:</b>
<b>C-2. Average Arrangement Time</b>
<b>Definition:</b>
Measures the average time from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Any Bona Fide firm order cancelled by the CLEC</li><li>• Bona Fide firm orders to augment previously completed arrangements</li><li>• Time for BST to obtain permits</li><li>• Time during which the collocation contract is being negotiated</li></ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.
<b>Calculation:</b>
$\text{Average Arrangement Time} = \frac{\Sigma(\text{Date Collocation Arrangement is Complete}) - (\text{Date Order for Collocation Arrangement Submitted})}{\text{Total Number of Collocation Arrangements Completed during Reporting Period}}$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Individual CLEC (alias) aggregate</li><li>• Aggregate of all CLECs</li></ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)</li><li>• Virtual</li><li>• Physical</li></ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"><li>• Report period</li><li>• Aggregate data</li></ul>
<b>Retail Analog/Benchmark:</b>
See Appendix D

Revision Date: 01/27/00 (tg)

**COLLOCATION**

<b>Report/Measurement:</b>
<b>C-3. Percent of Due Dates Missed</b>
<b>Definition:</b>
Measures the percent of missed due dates for <u>collocation arrangements</u> .
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Any Bona Fide firm order cancelled by the CLEC</li><li>• Bona Fide firm orders to augment previously completed arrangements</li><li>• Time for BST to obtain permits</li><li>• Time during which the <u>collocation contract</u> is being negotiated</li></ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
<b>Calculation:</b>
$\% \text{ of Due Dates Missed} = \Sigma (\text{Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period}) / \text{Number of Orders Completed in Reporting Period} \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"><li>• Individual CLEC (alias) aggregate</li><li>• Aggregate of all CLECs</li></ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"><li>• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area-MSA)</li><li>• Virtual</li><li>• Physical</li></ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"><li>• Report period</li><li>• Aggregate data</li></ul>
<b>Retail Analog/Benchmark:</b>
$90\% \leq \text{Commit Date}$

Revision Date: 01/27/00 (tg)

## Appendix A: Reporting Scope\*

Standard Service Groupings	
	<p><u>Pre-Order, Ordering</u></p> <ul style="list-style-type: none"> <li>➤ Resale Residence</li> <li>➤ Resale Business</li> <li>➤ Resale Special</li> <li>➤ Local Interconnection Trunks</li> <li>➤ UNE</li> <li>➤ UNE - Loops w/LNP</li> </ul> <p><u>Provisioning</u></p> <ul style="list-style-type: none"> <li>➤ UNE Non-Design</li> <li>➤ UNE Design</li> <li>➤ Local Interconnection Trunks</li> <li>➤ Resale Residence</li> <li>➤ Resale Business</li> <li>➤ Resale Design</li> <li>➤ BST Trunks</li> <li>➤ BST Residence Retail</li> <li>➤ BST Business Retail</li> <li>➤ BST Design Retail</li> </ul> <p><u>Maintenance and Repair</u></p> <ul style="list-style-type: none"> <li>➤ Local Interconnection Trunks</li> <li>➤ UNE Non-Design</li> <li>➤ UNE Design</li> <li>➤ Resale Residence</li> <li>➤ Resale Business</li> <li>➤ Resale Design</li> <li>➤ BST Interconnection Trunks</li> <li>➤ BST Residence Retail</li> <li>➤ BST Business Retail</li> <li>➤ BST Design Retail</li> </ul> <p><u>Local Interconnection Trunk Group Blockage</u></p> <ul style="list-style-type: none"> <li>➤ BST CTTG Trunk Groups</li> <li>➤ CLEC Trunk Groups</li> </ul>

## Appendix A: Reporting Scope\*

<b>Standard Service Order Activities</b>	<ul style="list-style-type: none"> <li>➤ New Service Installations</li> <li>➤ Service Migrations Without Changes</li> <li>➤ Service Migrations With Changes</li> <li>➤ Move and Change Activities</li> <li>➤ Service Disconnects (Unless noted otherwise)</li> </ul>
<p><i>These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.</i></p>	
<b>Pre-Ordering Query Types:</b>	<ul style="list-style-type: none"> <li>➤ Address</li> <li>➤ Telephone Number</li> <li>➤ Appointment Scheduling</li> <li>➤ Customer Service Record</li> <li>➤ Feature Availability</li> </ul>
<b>Maintenance Query Types:</b>	
<b>Report Levels</b>	<ul style="list-style-type: none"> <li>➤ CLEC RESH</li> <li>➤ CLEC MSA</li> <li>➤ CLEC State</li> <li>➤ CLEC Region</li> <li>➤ Aggregate CLEC State</li> <li>➤ Aggregate CLEC Region</li> <li>➤ BST State</li> <li>➤ BST Region</li> </ul>

\* Scope is report, data source and system dependent, and, therefore, will differ with each report.



## Appendix B: Glossary of Acronyms and Terms

<b>A</b>	<b>ACD</b>	Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.
	<b>AGGREGATE</b>	Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	<b>ASR</b>	Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.
	<b>ATLAS</b>	Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.
	<b>ATLASTN</b>	ATLAS software contract for Telephone Number
	<b>AUTO CLARIFICATION</b>	The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.
<b>B</b>	<b>BILLING</b>	The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.
	<b>BOCRIS</b>	Business Office Customer Record Information System - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	<b>BRC</b>	Business Repair Center - The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	<b>BST</b>	BellSouth Telecommunications, Inc.
<b>C</b>	<b>CKTID</b>	A unique identifier for elements combined in a service configuration
	<b>CLEC</b>	Competitive Local Exchange Carrier
	<b>CMDS</b>	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	<b>COFFI</b>	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

## Appendix B: Glossary of Acronyms and Terms – Continued

<b>C</b>	<b>COFIUSOC</b>	COFFI software contract for feature/service information
	<b>CRIS</b>	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	<b>CRSACCTS</b>	CRIS software contract for CSR information
	<b>CSR</b>	Customer Service Record
	<b>CTTG</b>	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
<b>D</b>	<b>DESIGN</b>	Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities
	<b>DISPOSITION &amp; CAUSE</b>	Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.
	<b>DLETH</b>	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	<b>DLR</b>	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	<b>DOE</b>	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	<b>DSAP</b>	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	<b>DSAPDDI</b>	DSAP software contract for schedule information
<b>E</b>	<b>E911</b>	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	<b>EDI</b>	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
<b>F</b>	<b>FATAL REJECT</b>	The number of LSRs that were electronically rejected from LEO, which checks to see if the LSR has all the required fields correctly populated
	<b>FLOW-THROUGH</b>	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	<b>FOC</b>	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

## Appendix B: Glossary of Acronyms and Terms - Continued

<b>G</b>		
<b>H</b>	<b>HAL</b>	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	<b>HALCRIS</b>	HAL software contract for CSR information
<b>I</b>	<b>ISDN</b>	Integrated Services Digital Network
<b>K</b>		
<b>L</b>	<b>LCSC</b>	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	<b>LEGACY SYSTEM</b>	Term used to refer to BellSouth Operations Support Systems (see OSS)
	<b>LENS</b>	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	<b>LEO</b>	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	<b>LESOG</b>	Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.
	<b>LMOS</b>	Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.
	<b>LMOS HOST</b>	LMOS host computer
	<b>LMOSupd</b>	LMOS updates
	<b>LNP</b>	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	<b>LOOPS</b>	Transmission paths from the central office to the customer premises.
	<b>LSR</b>	Local Service Request - A request for local resale service or unbundled network elements from a CLEC.
<b>M</b>	<b>MAINTENANCE &amp; REPAIR</b>	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	<b>MARCH</b>	A BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

## Appendix B: Glossary of Acronyms and Terms – Continued

<b>N</b>	<b>NC</b>	<b>"No Circuits" - All circuits busy announcement</b>
<b>O</b>	<b>OASIS</b>	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	<b>OASISBSN</b>	OASIS software contract for feature/service
	<b>OASISCAR</b>	OASIS software contract for feature/service
	<b>OASISLPC</b>	OASIS software contract for feature/service
	<b>OASISMTN</b>	OASIS software contract for feature/service
	<b>OASISNET</b>	OASIS software contract for feature/service
	<b>OASISOCP</b>	OASIS software contract for feature/service
	<b>ORDERING</b>	The process and functions by which resale services or unbundled network elements are ordered from BellSouth as well as the process by which an LSR or ASR is placed with BellSouth.
	<b>OSPCM</b>	Outside Plant Contract Management System - Provides Scheduling Information.
	<b>OSS</b>	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	<b>OUT OF SERVICE</b>	Customer has no dial tone and cannot call out.
	<b>P</b>	
	<b>POTS</b>	Plain Old Telephone Service
	<b>PREDICTOR</b>	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	<b>PREORDERING</b>	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	<b>PROVISIONING</b>	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	<b>PSIMS</b>	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	<b>PSIMSORB</b>	PSIMS software contract for feature/service

Appendix B: Glossary of Acronyms and Terms – Continued

<b>Q</b>		
<b>R</b>	<b>RNS</b>	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	<b>RRC</b>	Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.
	<b>RSAG</b>	Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.
		RSAG software contract for address search
	<b>RSAGADDR</b>	RSAG software contract for telephone number search
	<b>RSAGTN</b>	
<b>S</b>	<b>SOCS</b>	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	<b>SOIR</b>	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
<b>T</b>	<b>TAFI</b>	Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.
	<b>TAG</b>	Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.
	<b>TN</b>	Telephone Number
	<b>TOTAL MANUAL FALLOUT</b>	The number of LSRs which are entered electronically but require manual entering into a service order generator.
<b>U</b>	<b>UNE</b>	Unbundled Network Element
<b>V</b>		
<b>W</b>	<b>WTN</b>	A unique identifier for elements combined in a service configuration
<b>X</b>		
<b>Y</b>		
<b>Z</b>		
<b>Σ</b>		Sum of:

## Appendix C

### BELLSOUTH'S AUDIT POLICY:

BellSouth currently provides many CLECs with certain audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit of the SQM for every CLEC with which it has a contract. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission or by a CLEC exercising contractual audit rights, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLEC(s) for each of the next five (5) years (2000 – 2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLEC or CLECs.
2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).
3. BellSouth, the PSC and the CLEC(s) shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

APPENDIX D Analogues and Benchmarks					
BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES	Retail Analogue	Benchmark*
Pre-Ordering	Percent Response Received within "X" seconds		Parity w/ retail where applicable.		99.5%
	OSS Interface Availability				
Ordering	Percent Flow-Through Service Request				90% 80% 80%
	<ul style="list-style-type: none"> <li>Residence</li> <li>Business</li> <li>UNE</li> </ul>				Diagnostic.
	Percent Rejected Service Request	Diagnostic			
	Reject Interval (Mechanized)	UD		UD	95% within 1 hrs
	<ul style="list-style-type: none"> <li>Reject Interval (Non-Mechanized and Partially Mechanized)</li> </ul>	UD		UD	85% < 24 hrs
	Firm Order Confirmation Timeliness (Mechanized)	UD		UD	95% within 4 hrs
	(Non-Mechanized and Partially Mechanized)				85% < 48 Hrs
	Speed of Answer in Ordering Center	X		X	
Provisioning	Mean Held Order Interval				
	<ul style="list-style-type: none"> <li>Resale Residence</li> </ul>	X			
	<ul style="list-style-type: none"> <li>Resale Business</li> </ul>	X			
	<ul style="list-style-type: none"> <li>Resale Design</li> </ul>	X			
	<ul style="list-style-type: none"> <li>Resale PBX</li> </ul>	X			
	<ul style="list-style-type: none"> <li>Resale Centrex</li> </ul>	X			
	<ul style="list-style-type: none"> <li>Resale IDSN</li> </ul>	X			
	<ul style="list-style-type: none"> <li>UNE Loop and Port Combos</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE 2w Loop with NP – Non-Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE 2w Loop without NP – Non-Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE Loop Other with NP Non-Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE Loop Other without NP Non-Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE Other Non Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE 2w Loop with NP – Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE 2w Loop without NP – Design</li> </ul>			Retail Residence and Business	
	<ul style="list-style-type: none"> <li>UNE Loop Other with NP – Design</li> </ul>			Retail Design	

APPENDIX D Analog and Benchmarks					
BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES	Retail Analogue	Benchmark*
	• UNE Loop Other without NP - Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	Average Jeopardy Notice Interval (Mechanized)				
	• Resale Residence				95% >=24 Hrs
	• Resale Business				95% >=24 Hrs
	• Resale Design				95% >=24 Hrs
	• Resale PBX				95% >=24 Hrs
	• Resale Centrex				95% >=24 Hrs
	• Resale IDSN				95% >=24 Hrs
	• UNE Loop and Port Combos				95% >=24 Hrs
	• UNE 2w Loop with NP – Non-Design				95% >=24 Hrs
	• UNE 2w Loop without NP – Non-Design				95% >=24 Hrs
	• UNE Loop Other with NP Non-Design				95% >=24 Hrs
	• UNE Loop Other without NP Non-Design				95% >=24 Hrs
	• UNE Other Non-Design				95% >=24 Hrs
	• UNE 2w Loop with NP – Design				95% >=24 Hrs
	• UNE 2w Loop without NP – Design				95% >=24 Hrs
	• UNE Loop Other with NP – Design				95% >=24 Hrs
	• UNE Loop Other without NP - Design				95% >=24 Hrs
	• UNE Other Design				95% >=24 Hrs
	• Local Interconnection Trunks				95% >=24 Hrs
	% of Orders given jeopardy notice (Mechanized)				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design			Retail Residence and Business	
	• UNE Loop Other with NP Non-Design			Retail Residence and Business	



**APPENDIX D**  
**Analogs and Benchmarks**

BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES	Retail Analogue	Benchmark*
	• UNE Loop Other without NP Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop with NP – Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Design			Retail Residence and Business	
	• UNE Loop Other with NP – Design			Retail Design	
	• UNE Loop Other without NP - Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>Percent Missed Installation Appointments</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design			Retail Residence and Business	
	• UNE Loop Other with NP Non-Design			Retail Residence and Business	
	• UNE Loop Other without NP Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop with NP – Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Design			Retail Residence and Business	
	• UNE Loop Other with NP – Design			Retail Design	
	• UNE Loop Other without NP – Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>Order Completion Interval</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			

APPENDIX D Analogues and Benchmarks				
BST SQM. Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES Retail Analogue	Benchmark*
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	<b>Average Completion Notice Interval – Resale POTS (Mech)</b>			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	<b>Percent Provisioning Troubles within 30 Days</b>			

**APPENDIX D**  
**Analogs and Benchmarks**

BST SQM Category	MEASURES AND SUB-METRICS	UNES		Retail Analogue	Benchmark*
		RESALE Retail Analogue	UNES		
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design			Retail Residence and Business	
	• UNE Loop Other with NP Non-Design			Retail Residence and Business	
	• UNE Loop Other without NP Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop with NP – Design			Retail Residence and Business	
	• UNE 2w Loop without NP – Design			Retail Residence and Business	
	• UNE Loop Other with NP – Design			Retail Design	
	• UNE Loop Other without NP - Design			Retail Design	
	• UNE Other Design			Retail-Design	
	• Local Interconnection Trunks	X			
	<b>Total Service Order Cycle Time</b>	Diag.		Diagnostic	Diagnostic
	<b>Customer Trouble Report Rate</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop – Non-Design			Retail Residence and Business	
	• UNE Loop Other - Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop – Design			Retail Residence and Business	
	• UNE Loop Other – Design			Retail Design	
	• UNE Other Design			Retail Design	

APRENDIX D					
Analogs and Benchmarks					
BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES	Retail Analogue	Benchmark*
	• Local Interconnection Trunks	X			
	<b>Percent Missed Repair Appointments</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop – Non-Design			Retail Residence and Business	
	• UNE Loop Other - Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop – Design			Retail Residence and Business	
	• UNE Loop Other – Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>Maintenance Average Duration</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop – Non-Design			Retail Residence and Business	
	• UNE Loop Other - Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop – Design			Retail Residence and Business	
	• UNE Loop Other – Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>Percent Repeat Troubles within 30 Days</b>				
	• Resale Residence	X			

APPENDIX D Analogues and Benchmarks					
BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES	Retail Analogue	Benchmark*
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop – Non-Design			Retail Residence and Business	
	• UNE Loop Other - Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop – Design			Retail Residence and Business	
	• UNE Loop Other – Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>Out of Service &gt; 24hrs</b>				
	• Resale Residence	X			
	• Resale Business	X			
	• Resale Design	X			
	• Resale PBX	X			
	• Resale Centrex	X			
	• Resale IDSN	X			
	• UNE Loop and Port Combos			Retail Residence and Business	
	• UNE 2w Loop – Non-Design			Retail Residence and Business	
	• UNE Loop Other - Non-Design			Retail Residence and Business	
	• UNE Other Non Design			Retail Residence and Business	
	• UNE 2w Loop – Design			Retail Residence and Business	
	• UNE Loop Other – Design			Retail Design	
	• UNE Other Design			Retail Design	
	• Local Interconnection Trunks	X			
	<b>OSS Interface Availability</b>				
	• All systems except ECTA	X			
	• ECTA				99.5%
	<b>OSS Response Interval and %</b>				
	• TAFI (Front End)	X			

APPENDIX D Analogues and Benchmarks					
BST SQM Category	MEASURES AND SUB-METRICS	RETAIL Analogue	UNES	Retail Analogue	Benchmark*
	<ul style="list-style-type: none"> <li>CRIS, DLETH, DLR, OSPCM, LMOS, LMOSUP, MARCH, Predictor, SOCS, LNP (Partly by Design)</li> </ul>	PBD			
	Average Answer Time – Repair Center	X			
	Invoice Accuracy	X			
	Mean Time To Deliver Invoices	X			
	Usage Data Delivery Accuracy	X			
	Usage Data Delivery Timeliness	X			
	Usage Data Delivery Completeness	X			
	Mean Time to Deliver Usage	X			
	Average Speed to Answer	PBD			
	% Answered in "X" Seconds	PBD			
	Average Speed to Answer	PBD			
	% Answered in "X" Seconds	PBD			
	Timeliness	PBD			
	Accuracy	PBD			
	Mean Interval	PBD			
	Trunk Group Service Report (Percent Trunk Blockage) Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BST.	X			
	Trunk Group Service Report (Percent Trunk Blockage)	X			
	Average Disconnect Timeliness Interval				
	Percent Missed Installation Appointments				
	FOC Mechanized				95% ≤4 hours
	% Reject Service Request				95% ≤1 hour
	Average Reject Interval Mechanized				
	TSOC				
	% Flow Through				80%

APPENDIX D Analog and Benchmarks				
BST SQM Category	MEASURES AND SUB-METRICS	RESALE Retail Analogue	UNES Retail Analogue	Benchmark*
Customer Coordinated Conversions	<u>Coordinated Customer Conversions – UNE Loop</u>			95% ≤ 15min
	<u>Coordinated Customer Conversions – LNP</u>			95% < 15 min
Collocation +	% of Due Dates Missed			90% < Comm Data
	<u>Average Response Time</u>		FL PSC is addressing this in generic docket	
+A contract with each CLEC required.	<u>Average Arrangement Time</u>		FL PSC is addressing this in generic docket	

Note 1: PBD = Parity by Design. UD = Under Development -- Benchmarks will be replaced when Analogs are complete.

Note2: The retail analog for UNE Non-Design and UNE 2w Loops – Design is the average of Retail Residence Dispatch and Retail Business Dispatch transactions for the particular month. The retail analog for other UNE Design is Retail Design Dispatch.

Note3: Analog and Benchmarks will be re-evaluated periodically, at least once a year, to validate applicability.

# EXHIBIT B



### VSEEMIII TIER-1 SUBMETRICS

- ❑ FOC Timeliness (Mechanized only)
- ❑ Reject Interval (Mechanized only)
- ❑ Order Completion Interval (Dispatch only) – Resale POTS
- ❑ Order Completion Interval (Dispatch only) – Resale Design
- ❑ Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- ❑ Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- ❑ Order Completion Interval (Dispatch only) – IC Trunks
- ❑ Percent Missed Installation Appointments – Resale POTS
- ❑ Percent Missed Installation Appointments – Resale Design
- ❑ Percent Missed Installation Appointments – UNE Loop and Port Combos
- ❑ Percent Missed Installation Appointments – UNE Loops
- ❑ Percent Provisioning Troubles within 4 Days - Resale POTS
- ❑ Percent Provisioning Troubles within 4 Days - Resale Design
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loops
- ❑ Customer Trouble Report Rate – Resale POTS
- ❑ Customer Trouble Report Rate – Resale Design
- ❑ Customer Trouble Report Rate - UNE Loop and Port Combos
- ❑ Customer Trouble Report Rate - UNE Loops
- ❑ Percent Missed Repair Appointments – Resale POTS
- ❑ Percent Missed Repair Appointments - Resale Design
- ❑ Percent Missed Repair Appointments - UNE Loop and Port Combos
- ❑ Percent Missed Repair Appointments - UNE Loops
- ❑ Maintenance Average Duration – Resale POTS
- ❑ Maintenance Average Duration – Resale Design
- ❑ Maintenance Average Duration - UNE Loop and Port Combos
- ❑ Maintenance Average Duration - UNE Loops
- ❑ Maintenance Average Duration – IC Trunks
- ❑ Percent Repeat Troubles within 30 Days – Resale POTS
- ❑ Percent Repeat Troubles within 30 Days – Resale Design
- ❑ Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- ❑ Percent Repeat Troubles within 30 Days - UNE Loops
- ❑ Percent Trunk Blockage
- ❑ LNP Disconnect Timeliness
- ❑ LNP Percent Missed Installation Appointment
- ❑ Coordinated Customer Conversions for UNE Loops
- ❑ Coordinated Customer Conversions for LNP
- ❑ Percent Missed Collocation Due Dates

## VSEEMIII TIER-2 SUBMETRICS

- ❑ Percent Response Received within "X" seconds – Pre-Order OSS
- ❑ OSS Interface Availability
- ❑ Order Process Percent Flow-Through (Mechanized only)
- ❑ Order Completion Interval (Dispatch only) – Resale POTS
- ❑ Order Completion Interval (Dispatch only) – Resale Design
- ❑ Order Completion Interval (No Dispatch only) – UNE Loop and Port Combos
- ❑ Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- ❑ Order Completion Interval (Dispatch only) – IC Trunks
- ❑ Percent Missed Installation Appointments – Resale POTS
- ❑ Percent Missed Installation Appointments – Resale Design
- ❑ Percent Missed Installation Appointments – UNE Loop and Port Combos
- ❑ Percent Missed Installation Appointments – UNE Loops
- ❑ Percent Provisioning Troubles within 4 Days - Resale POTS
- ❑ Percent Provisioning Troubles within 4 Days - Resale Design
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- ❑ Percent Provisioning Troubles within 4 Days - UNE Loops
- ❑ Customer Trouble Report Rate – Resale POTS
- ❑ Customer Trouble Report Rate – Resale Design
- ❑ Customer Trouble Report Rate - UNE Loop and Port Combos
- ❑ Customer Trouble Report Rate - UNE Loops
- ❑ Percent Missed Repair Appointments – Resale POTS
- ❑ Percent Missed Repair Appointments - Resale Design
- ❑ Percent Missed Repair Appointments - UNE Loop and Port Combos
- ❑ Percent Missed Repair Appointments - UNE Loops
- ❑ Maintenance Average Duration – Resale POTS
- ❑ Maintenance Average Duration – Resale Design
- ❑ Maintenance Average Duration - UNE Loop and Port Combos
- ❑ Maintenance Average Duration - UNE Loops
- ❑ Maintenance Average Duration – IC Trunks
- ❑ Percent Repeat Troubles within 30 Days – Resale POTS
- ❑ Percent Repeat Troubles within 30 Days – Resale Design
- ❑ Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- ❑ Percent Repeat Troubles within 30 Days - UNE Loops
- ❑ Billing Timeliness
- ❑ Billing Accuracy
- ❑ Usage Data Delivery Timeliness
- ❑ Usage Data Delivery Accuracy
- ❑ Percent Trunk Blockage
- ❑ LNP Disconnect Timeliness
- ❑ LNP Percent Missed Installation Appointment
- ❑ Coordinated Customer Conversions for UNE Loops
- ❑ Coordinated Customer Conversions for LNP
- ❑ Percent Missed Collocation Due Dates

### VSEEMIII TIER-3 SUBMETRICS

- ❑ Percent Missed Installation Appointments – Resale POTS
- ❑ Percent Missed Installation Appointments – Resale Design
- ❑ Percent Missed Installation Appointments – UNE Loop and Port Combos
- ❑ Percent Missed Installation Appointments – UNE Loops
- ❑ Percent Missed Repair Appointments – Resale POTS
- ❑ Percent Missed Repair Appointments - Resale Design
- ❑ Percent Missed Repair Appointments - UNE Loop and Port Combos
- ❑ Percent Missed Repair Appointments - UNE Loops
- ❑ Billing Timeliness
- ❑ Billing Accuracy
- ❑ Percent Trunk Blockage
- ❑ Percent Missed Collocation Due Dates

VSEEM III	MEASURES AND SUB-METRICS	RETAIL ANALOGUE	BENCH MARK
Pre-Ordering	Percent Response Received within "X" seconds	Resale (x) and UNEs	
	OSS Interface Availability	Retail Analogue + 4 sec	
Ordering	Percent Flow-Through Service Request (Fully Mechanized only)	x	
	Firm Order Confirmation Timeliness (Mechanized only)		90% 95% ≤ 4 hrs
	Reject Interval (Mechanized only)		95% ≤ 1
Provisioning	Order Completion Interval (Dispatch only) – Resale POTS	x	
	Order Completion Interval (Dispatch only) – Resale Design	x	
	Order Completion Interval (No Dispatch only) – UNE Loop & Port Combos	Retail Residence and Business	
	Order Completion Interval (Dispatch only) – UNE Loops	Design: Retail Design Dispatch 'w' Orders Non-Design: Retail Res, Bus Dispatch 'w' Orders	
	Order Completion Interval (Dispatch only) – IC Trunks	x	
	Percent Missed Installation Appointments – Resale POTS	x	
	Percent Missed Installation Appointments – Resale Design	x	
	Percent Missed Installation Appointments – UNE Loop and Port Combos	Retail Residence and Business	
	Percent Missed Installation Appointments – UNE Loops	Design: Retail Design Non-Design: Retail Res, Bus <sup>1</sup>	
	Percent Provisioning Troubles within 4 Days - Resale POTS	x	
	Percent Provisioning Troubles within 4 Days - Resale Design	x	
	Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos	Retail Residence and Business	
	Percent Provisioning Troubles within 4 Days - UNE Loops	Design: Retail Design <sup>1</sup> Non-Design: Retail Res, Bus <sup>1</sup>	
Maintenance	Customer Trouble Report Rate – Resale POTS	x	
	Customer Trouble Report Rate – Resale Design	x	
	Customer Trouble Report Rate - UNE Loop and Port Combos	Retail Residence and Business	
	Customer Trouble Report Rate - UNE Loops	Design: Retail Design Non-Design: Retail Res, Bus <sup>1</sup>	
	Percent Missed Repair Appointments – Resale POTS	x	
	Percent Missed Repair Appointments - Resale Design	x	
	Percent Missed Repair Appointments - UNE Loop and Port Combos	Retail Residence and Business	
	Percent Missed Repair Appointments - UNE Loops	Design: Retail Design <sup>1</sup> Non-Design: Retail Res, Bus <sup>1</sup>	

NOTES:

<sup>1</sup> The retail analog for UNE Non-Design is the average of all retail residence and retail business transactions for the particular month.  
The retail

analog for UNE Design is calculated similarly using retail residence, business and design results.

<sup>2</sup> UD = Under Development

Maintenance Continued	Maintenance Average Duration – Resale POTS	x	
	Maintenance Average Duration – Resale Design	x	
	Maintenance Average Duration - UNE Loop and Port Combos	Retail Residence and Business Design: Retail Design <sup>1</sup>	
	Maintenance Average Duration - UNE Loops	Non-Design: Retail Res, Bus <sup>1</sup>	
	Maintenance Average Duration – IC Trunks	x	
	Percent Repeat Troubles within 30 Days – Resale POTS	x	
	Percent Repeat Troubles within 30 Days – Resale Design	x	
	Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos	Retail Residence and Business Design: Retail Design <sup>1</sup>	
	Percent Repeat Troubles within 30 Days - UNE Loops	Non-Design: Retail Res, Bus <sup>1</sup>	
Billing	Invoice Accuracy	x	
	Mean Time To Deliver Invoices	x	
	Usage Data Delivery Accuracy	x	
	Usage Data Delivery Timeliness	x	
Trunk Blockage	Trunk Group Service Report (Percent Trunk Blockage)	x	UD <sup>2</sup>
LNP	Average Disconnect Timeliness Interval		UD <sup>2</sup>
	Percent Missed Installation Appointments		95% < 15min
CC	Coordinated Customer Conversions – UNE Loop		95% < 15min
Conversions	Coordinated Customer Conversions – LNP		95% < 15min
Collocation	% of Due Dates Missed		< 10%

NOTES:

<sup>1</sup> The retail analog for UNE Non-Design is the average of all retail residence and retail business transactions for the particular month.  
The retail

analog for UNE Design is calculated similarly using retail residence, business and design results.

<sup>2</sup> UD = Under Development

# EXHIBIT C

## Statistical Methods for BellSouth Performance Measure Analysis

### I. Necessary Properties for a Test Methodology

The statistical process for testing if competing local exchange carriers (CLECs) customers are being treated equally with BellSouth (BST) customers involves more than just a mathematical formula. Three key elements need to be considered before an appropriate decision process can be developed. These are

- the type of data,
- the type of comparison, and
- the type of performance measure.

Once these elements are determined a test methodology should be developed that complies with the following properties.

- Like-to-Like Comparisons. When possible, data should be compared at appropriate levels, e.g. wire center, time of month, dispatched, residential, new orders. The testing process should:
  - Identify variables that may affect the performance measure.
  - Record these important confounding covariates.
  - Adjust for the observed covariates in order to remove potential biases and to make the CLEC and the ILEC units as comparable as possible.
- Aggregate Level Test Statistic. Each performance measure of interest should be summarized by one overall test statistic giving the decision maker a rule that determines whether a statistically significant difference exists. The test statistic should have the following properties.
  - The method should provide a single overall index, on a standard scale.
  - If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on the covariate had not been done.
  - The contribution of each comparison cell should depend on the number of observations in the cell.
  - Cancellation between comparison cells should be limited.
  - The index should be a continuous function of the observations.
- Production Mode Process. The decision system must be developed so that it does not require intermediate manual intervention, i.e. the process must be a “black box.”
  - Calculations are well defined for possible eventualities.
  - The decision process is an algorithm that needs no manual intervention.
  - Results should be arrived at in a timely manner.
  - The system must recognize that resources are needed for other performance measure-related processes that also must be run in a timely manner.
  - The system should be auditable, and adjustable over time.
- Balancing. The testing methodology should balance Type I and Type II Error probabilities.
  - $P(\text{Type I Error}) = P(\text{Type II Error})$  for well defined null and alternative hypotheses.
  - The formula for a test’s balancing critical value should be simple enough to calculate using standard mathematical functions, i.e. one should avoid methods that require computationally intensive techniques.

- Little to no information beyond the null hypothesis, the alternative hypothesis, and the number of observations should be required for calculating the balancing critical value.

In the following sections we describe appropriate testing processes that adhere as much as possible to the testing principles.

### Measurement Types

The performance measures that will undergo testing are of three types:

- 1) means
- 2) proportions, and
- 3) rates

While all three have similar characteristics (a proportion is the average of a measure that takes on only the values of 0 or 1), a proportion or rate is derived from count data while a mean is generally an average of interval measurements.

## **II. Testing Methodology – The Truncated Z**

Many covariates are chosen in order to provide deep comparison levels. In each comparison cell, a Z statistic is calculated. The form of the Z statistic may vary depending on the performance measure, but it should be distributed approximately as a standard normal, with mean zero and variance equal to one. Assuming that the test statistic is derived so that it is negative when the performance for the CLEC is worse than for the ILEC, a positive truncation is done – i.e. if the result is negative it is left alone, if the result is positive it is changed to zero. A weighted average of the truncated statistics is calculated where a cell weight depends on the volume of BST and CLEC orders in the cell. The weighted average is re-centered by the theoretical mean of a truncated distribution, and this is divided by the standard error of the weighted average. The standard error is computed assuming a fixed effects model.

### *Proportion Measures*

For performance measures that are calculated as a proportion, in each adjustment cell, the truncated Z and the moments for the truncated Z can be calculated in a direct manner. In adjustment cells where proportions are not close to zero or one, and where the sample sizes are reasonably large, a normal approximation can be used. In this case, the moments for the truncated Z come directly from properties of the standard normal distribution. If the normal approximation is not appropriate, then the Z statistic is calculated from the hypergeometric distribution. In this case, the moments of the truncated Z are calculated exactly using the hypergeometric probabilities.

### *Rate Measures*

The truncated Z methodology for rate measures has the same general structure for calculating the Z in each cell as proportion measures. For a rate measure, there are a fixed number of circuits or units for the CLEC,  $n_{2j}$  and a fixed number of units for BST,  $n_{1j}$ . Suppose that the performance measure is a “trouble rate.” The modeling assumption is that the occurrence of a trouble is independent between units and the number of troubles in n circuits follows a Poisson distribution with mean  $\lambda n$  where  $\lambda$  is the probability of a trouble in 1 circuit and n is the number of circuits.

In an adjustment cell, if the number of CLEC troubles is greater than 15 and the number of BST troubles is greater than 15, then the Z test is calculated using the normal approximation to the Poisson. In this case, the moments of the truncated Z come directly from properties of the standard normal distribution. Otherwise, if there are very few troubles, the number of CLEC troubles can be modeled using a binomial distribution with n equal to the total number of troubles (CLEC plus BST troubles.) In this case, the moments for the truncated Z are calculated explicitly using the binomial distribution.



*Mean Measures*

For mean measures, an adjusted t statistic is calculated for each like-to-like cell which has at least 7 BST and 7 CLEC transactions. A permutation test is used when one or both of the BST and CLEC sample sizes is less than 6. Both the adjusted t statistic and the permutation calculation are described in the technical appendix.

# **APPENDIX TECHNICAL DESCRIPTION**

We start by assuming that any necessary trimming of the data is complete, and that the data are disaggregated so that comparisons are made within appropriate classes or adjustment cells that define "like" observations.

## NOTATION AND EXACT TESTING DISTRIBUTIONS

Below, we have detailed the basic notation for the construction of the truncated z statistic. In what follows the word "cell" should be taken to mean a like-to-like comparison cell that has both one (or more) ILEC observation and one (or more) CLEC observation.

- $L$  = the total number of occupied cells
- $j$  =  $1, \dots, L$ ; an index for the cells
- $n_{1j}$  = the number of ILEC transactions in cell  $j$
- $n_{2j}$  = the number of CLEC transactions in cell  $j$
- $n_j$  = the total number transactions in cell  $j$ ;  $n_{1j} + n_{2j}$
- $X_{1jk}$  = individual ILEC transactions in cell  $j$ ;  $k = 1, \dots, n_{1j}$
- $X_{2jk}$  = individual CLEC transactions in cell  $j$ ;  $k = 1, \dots, n_{2j}$
- $Y_{jk}$  = individual transaction (both ILEC and CLEC) in cell  $j$
- $$= \begin{cases} X_{1jk} & k = 1, \dots, n_{1j} \\ X_{2jk} & k = n_{1j} + 1, \dots, n_j \end{cases}$$
- $\Phi^{-1}(\cdot)$  = the inverse of the cumulative standard normal distribution function

For Mean Performance Measures the following additional notation is needed.

- $\bar{X}_{1j}$  = the ILEC sample mean of cell  $j$
- $\bar{X}_{2j}$  = the CLEC sample mean of cell  $j$
- $S_{1j}^2$  = the ILEC sample variance in cell  $j$
- $S_{2j}^2$  = the CLEC sample variance in cell  $j$
- $y_{jk}$  = a random sample of size  $n_{2j}$  from the set of  $Y_{j1}, \dots, Y_{jn_j}$ ;  $k = 1, \dots, n_{2j}$
- $M_j$  = the total number of distinct pairs of samples of size  $n_{1j}$  and  $n_{2j}$ ;  

$$= \binom{n_j}{n_{1j}}$$

The exact parity test is the permutation test based on the "modified Z" statistic. For large samples, we can avoid permutation calculations since this statistic will be normal (or Student's t) to a good approximation. For small samples, where we cannot avoid permutation calculations, we have found that the difference between "modified Z" and the textbook "pooled Z" is negligible. We therefore propose to use the permutation test based on pooled Z for small samples. This decision speeds up the permutation computations considerably, because for each permutation we need only compute the sum of the CLEC sample values, and not the pooled statistic itself.

A permutation probability mass function distribution for cell  $j$ , based on the "pooled Z" can be written as

$$PM(t) = P(\sum_k y_{jk} = t) = \frac{\text{the number of samples that sum to } t}{M_j},$$

and the corresponding cumulative permutation distribution is

$$CPM(t) = P(\sum_k y_{jk} \leq t) = \frac{\text{the number of samples with sum} \leq t}{M_j}.$$

For Proportion Performance Measures the following notation is defined

- $a_{1j}$  = the number of ILEC cases possessing an attribute of interest in cell  $j$
- $a_{2j}$  = the number of CLEC cases possessing an attribute of interest in cell  $j$
- $a_j$  = the number of cases possessing an attribute of interest in cell  $j$ ;  $a_{1j} + a_{2j}$

The exact distribution for a parity test is the hypergeometric distribution. The hypergeometric probability mass function distribution for cell  $j$  is

$$HG(h) = P(H = h) = \begin{cases} \frac{\binom{n_{1j}}{h} \binom{n_{2j}}{a_j - h}}{\binom{n_j}{a_j}}, & \max(0, a_j - n_{2j}) \leq h \leq \min(a_j, n_{1j}) \\ 0 & \text{otherwise} \end{cases}$$

and the cumulative hypergeometric distribution is

$$CHG(x) = P(H \leq x) = \begin{cases} 0 & x < \max(0, a_j - n_{1j}) \\ \sum_{h=\max(0, a_j - n_{1j})}^x HG(h), & \max(0, a_j - n_{1j}) \leq x \leq \min(a_j, n_{2j}) \\ 1 & x > \min(a_j, n_{2j}) \end{cases}$$

For Rate Measures, the notation needed is defined as

- $b_{1j}$  = the number of ILEC base elements in cell  $j$
- $b_{2j}$  = the number of CLEC base elements in cell  $j$
- $b_j$  = the total number of base elements in cell  $j$ ;  $b_{1j} + b_{2j}$
- $\hat{r}_{1j}$  = the ILEC sample rate of cell  $j$ ;  $n_{1j}/b_{1j}$
- $\hat{r}_{2j}$  = the CLEC sample rate of cell  $j$ ;  $n_{2j}/b_{2j}$
- $q_j$  = the relative proportion of CLEC elements for cell  $j$ ;  $b_{2j}/b_j$

The exact distribution for a parity test is the binomial distribution. The binomial probability mass function distribution for cell  $j$  is

$$BN(k) = P(B = k) = \begin{cases} \binom{n_j}{k} q_j^k (1 - q_j)^{n_j - k}, & 0 \leq k \leq n_j, \\ 0 & \text{otherwise} \end{cases}$$

and the cumulative binomial distribution is

$$CBN(x) = P(B \leq x) = \begin{cases} 0 & x < 0 \\ \sum_{k=0}^x BN(k), & 0 \leq x \leq n_j. \\ 1 & x > n_j \end{cases}$$

### CALCULATING THE TRUNCATED Z

The general methodology for calculating an aggregate level test statistic is outlined below.

1. **Calculate cell weights,  $W_j$ .** A weight based on the number of transactions is used so that a cell which has a larger number of transactions has a larger weight. The actual weight formulae will depend on the type of measure.

*Mean Measure*

$$W_j = \sqrt{\frac{n_{1j} n_{2j}}{n_j}}$$

*Proportion Measure*

$$W_j = \sqrt{\frac{n_{2j} n_{1j}}{n_j} \cdot \frac{a_j}{n_j} \cdot \left(1 - \frac{a_j}{n_j}\right)}$$

*Rate Measure*

$$W_j = \sqrt{\frac{b_{1j} b_{2j}}{b_j} \cdot \frac{n_j}{b_j}}$$

2. **In each cell, calculate a Z value,  $Z_j$ .** A Z statistic with mean 0 and variance 1 is needed for each cell.

- If  $W_j = 0$ , set  $Z_j = 0$ .
- Otherwise, the actual Z statistic calculation depends on the type of performance measure.

*Mean Measure*

$$Z_j = \Phi^{-1}(\alpha)$$

where  $\alpha$  is determined by the following algorithm.

If  $\min(n_{1j}, n_{2j}) > 6$ , then determine  $\alpha$  as

$$\alpha = P(t_{n_j-1} \leq T_j),$$

that is,  $\alpha$  is the probability that a  $t$  random variable with  $n_{1j} - 1$  degrees of freedom, is less than

$$T_j = t_j + \frac{g}{6} \left( \frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j} n_{2j} (n_{1j} + n_{2j})}} \right) \left( t^2 + \frac{n_{2j} - n_{1j}}{2n_{1j} + n_{2j}} \right),$$

where

$$t_j = \frac{\bar{X}_{1j} - \bar{X}_{2j}}{s_{1j} \sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}$$

and the coefficient  $g$  is an estimate of the skewness of the parent population, which we assume is the same in all cells. It can be estimated from the ILEC values in the largest cells. This needs to be done only once for each measure. We have found that attempting to estimate this skewness parameter for each cell separately leads to excessive variability in the "adjusted"  $t$ . We therefore use a single compromise value in all cells.

Note, that  $t_j$  is the "modified  $Z$ " statistic. The statistic  $T_j$  is a "modified  $Z$ " corrected for the skewness of the ILEC data.

If  $\min(n_{1j}, n_{2j}) \leq 6$ , and

a)  $M_j \leq 1,000$  (the total number of distinct pairs of samples of size  $n_{1j}$  and  $n_{2j}$  is 1,000 or less).

- Calculate the sample sum for all possible samples of size  $n_{2j}$ .
- Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let  $R_0$  be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{M_j}$$

b)  $M_j > 1,000$

- Draw a random sample of 1,000 sample sums from the permutation distribution.
- Add the observed sample sum to the list. There is a total of 1001 sample sums. Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
- Let  $R_0$  be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{1001}.$$

### Proportion Measure

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}.$$

*Rate Measure*

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

3. Obtain a truncated Z value for each cell,  $Z_j^*$ . To limit the amount of cancellation that takes place between cell results during aggregation, cells whose results suggest possible favoritism are left alone. Otherwise the cell statistic is set to zero. This means that positive equivalent Z values are set to 0, and negative values are left alone. Mathematically, this is written as

$$Z_j^* = \min(0, Z_j).$$

4. Calculate the theoretical mean and variance of the truncated statistic under the null hypothesis of parity,  $E(Z_j^* | H_0)$  and  $\text{Var}(Z_j^* | H_0)$ . In order to compensate for the truncation in step 3, an aggregated, weighted sum of the  $Z_j^*$  will need to be centered and scaled properly so that the final aggregate statistic follows a standard normal distribution.

- If  $W_j = 0$ , then no evidence of favoritism is contained in the cell. The formulae for calculating  $E(Z_j^* | H_0)$  and  $\text{Var}(Z_j^* | H_0)$  cannot be used. Set both equal to 0.
- If  $\min(n_{1j}, n_{2j}) > 6$  for a mean measure,  $\min\left\{a_{1j}\left(1 - \frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1 - \frac{a_{2j}}{n_{2j}}\right)\right\} > 9$  for a proportion measure, or  $\min(n_{1j}, n_{2j}) > 15$  and  $n_j q_j (1 - q_j) > 9$  for a rate measure then

$$E(Z_j^* | H_0) = -\frac{1}{\sqrt{2\pi}}, \text{ and}$$

$$\text{Var}(Z_j^* | H_0) = \frac{1}{2} - \frac{1}{2\pi}.$$

- Otherwise, determine the total number of values for  $Z_j^*$ . Let  $z_{ji}$  and  $\theta_{ji}$ , denote the values of  $Z_j^*$  and the probabilities of observing each value, respectively.

$$E(Z_j^* | H_0) = \sum_i \theta_{ji} z_{ji}, \text{ and}$$

$$\text{Var}(Z_j^* | H_0) = \sum_i \theta_{ji} z_{ji}^2 - [E(Z_j^* | H_0)]^2.$$

The actual values of the  $z$ 's and  $\theta$ 's depends on the type of measure, and the sums in the equations are over all possible values of the index  $i$ .

*Mean Measure*

$$N_j = \min(M_j, 1,000), \quad i = 1, \dots, N_j$$

$$z_{ji} = \min \left\{ 0, 1 - \Phi^{-1} \left( \frac{R_i - 0.5}{N_j} \right) \right\} \quad \text{where } R_i \text{ is the rank of sample sum } i$$

$$\theta_j = \frac{1}{N_j}$$

*Proportion Measure*

$$z_{ji} = \min \left\{ 0, \frac{n_j i - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}} \right\}, \quad i = \min(a_j, n_{2j}), \dots, \max(0, a_j - n_{1j})$$

$$\theta_{ji} = \text{HG}(i)$$

*Rate Measure*

$$z_{ji} = \min \left\{ 0, \frac{i - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}} \right\}, \quad i = 0, \dots, n_j$$

$$\theta_{ji} = \text{BN}(i)$$

5. Calculate the aggregate test statistic,  $Z^T$ .

$$Z^T = \frac{\sum_j W_j Z_j^* - \sum_j W_j E(Z_j^* | H_0)}{\sqrt{\sum_j W_j^2 \text{Var}(Z_j^* | H_0)}}$$

**The Balancing Critical Value**

There are four key elements of the statistical testing process:

1. the null hypothesis,  $H_0$ , that parity exists between ILEC and CLEC services
2. the alternative hypothesis,  $H_a$ , that the ILEC is giving better service to its own customers
3. the Truncated  $\tilde{Z}$  test statistic,  $Z^T$ , and
4. a critical value,  $c$

The decision rule<sup>1</sup> is

- If  $Z^T < c$  then accept  $H_a$ .
- If  $Z^T \geq c$  then accept  $H_0$ .

There are two types of error possible when using such a decision rule:

<sup>1</sup> This decision rule assumes that a negative test statistic indicates poor service for the CLEC customer. If the opposite is true, then reverse the decision rule.



**Type I Error:** Deciding favoritism exists when there is, in fact, no favoritism.  
**Type II Error:** Deciding parity exists when there is, in fact, favoritism.

The probabilities of each type of each are:

$$\text{Type I Error: } \alpha = P(Z^T < c \mid H_0).$$

$$\text{Type II Error: } \beta = P(Z^T \geq c \mid H_a).$$

We want a balancing critical value,  $c_B$ , so that  $\alpha = \beta$ .

It can be shown that.

$$c_B = \frac{\sum_j W_j M(m_j, se_j) - \sum_j W_j \frac{-1}{\sqrt{2\pi}}}{\sqrt{\sum_j W_j^2 V(m_j, se_j) + \sum_j W_j^2 \left( \frac{1}{2} - \frac{1}{2\pi} \right)}}.$$

where

$$M(\mu, \sigma) = \mu \Phi\left(\frac{-\mu}{\sigma}\right) + \sigma \phi\left(\frac{-\mu}{\sigma}\right)$$

$$V(\mu, \sigma) = (\mu^2 + \sigma^2) \Phi\left(\frac{-\mu}{\sigma}\right) - \mu \sigma \phi\left(\frac{-\mu}{\sigma}\right) - M(\mu, \sigma)^2$$

$\Phi(\cdot)$  is the cumulative standard normal distribution function, and  $\phi(\cdot)$  is the standard normal density function.

This formula assumes that  $Z_j$  is approximately normally distributed within cell  $j$ . When the cell sample sizes,  $n_{1j}$  and  $n_{2j}$ , are small this may not be true. It is possible to determine the cell mean and variance under the null hypothesis when the cell sample sizes are small. It is much more difficult to determine these values under the alternative hypothesis. Since the cell weight,  $W_j$  will also be small (see calculate weights section above) for a cell with small volume, the cell mean and variance will not contribute much to the weighted sum. Therefore, the above formula provides a reasonable approximation to the balancing critical value.

The values of  $m_j$  and  $se_j$  will depend on the type of performance measure.

#### Mean Measure

For mean measures, one is concerned with two parameters in each cell, namely, the mean and variance. A possible lack of parity may be due to a difference in cell means, and/or a difference in cell variances. One possible set of hypotheses that capture this notion, and take into account the assumption that transaction are identically distributed within cells is:

$$H_0: \mu_{1j} = \mu_{2j}, \sigma_{1j}^2 = \sigma_{2j}^2$$

$$H_a: \mu_{2j} = \mu_{1j} + \delta_j \sigma_{1j}, \sigma_{2j}^2 = \lambda_j \sigma_{1j}^2 \quad \delta_j > 0, \lambda_j \geq 1 \text{ and } j = 1, \dots, L.$$

Under this form of alternative hypothesis, the cell test statistic  $Z_j$  has mean and standard error given by

$$m_j = \frac{-\delta_j}{\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}, \text{ and}$$

$$se_j = \sqrt{\frac{\lambda_j n_{1j} + n_{2j}}{n_{1j} + n_{2j}}}$$

### Proportion Measure

For a proportion measure there is only one parameter of interest in each cell, the proportion of transaction possessing an attribute of interest. A possible lack of parity may be due to a difference in cell proportions. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells while allowing for an analytically tractable solution is:

$$H_0: \frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = 1$$

$$H_1: \frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = \psi_j \quad \psi_j > 1 \text{ and } j = 1, \dots, L.$$

These hypotheses are based on the "odds ratio." If the transaction attribute of interest is a missed trouble repair, then an interpretation of the alternative hypothesis is that a CLEC trouble repair appointment is  $\psi_j$  times more likely to be missed than an ILEC trouble.

Under this form of alternative hypothesis, the within cell asymptotic mean and variance of  $a_{1j}$  are given by<sup>2</sup>

$$E(a_{1j}) = n_j \pi_j^{(1)}$$

$$\text{var}(a_{1j}) = \frac{n_j}{\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}}$$

where

<sup>2</sup> Stevens, W. L. (1951) Mean and Variance of an entry in a Contingency Table. *Biometrika*, 38, 468-470.

$$\begin{aligned}
 \pi_j^{(1)} &= f_j^{(1)} (n_j^2 + f_j^{(2)} + f_j^{(3)} - f_j^{(4)}) \\
 \pi_j^{(2)} &= f_j^{(1)} (-n_j^2 - f_j^{(2)} + f_j^{(3)} + f_j^{(4)}) \\
 \pi_j^{(3)} &= f_j^{(1)} (-n_j^2 + f_j^{(2)} - f_j^{(3)} + f_j^{(4)}) \\
 \pi_j^{(4)} &= f_j^{(1)} \left( n_j^2 \left( \frac{2}{\psi_j} - 1 \right) - f_j^{(2)} - f_j^{(3)} - f_j^{(4)} \right) \\
 f_j^{(1)} &= \frac{1}{2n_j^2 \left( \frac{1}{\psi_j} - 1 \right)} \\
 f_j^{(2)} &= n_j n_{1j} \left( \frac{1}{\psi_j} - 1 \right) \\
 f_j^{(3)} &= n_j a_j \left( \frac{1}{\psi_j} - 1 \right) \\
 f_j^{(4)} &= \sqrt{n_j^2 \left[ 4n_{1j} (n_j - a_j) \left( \frac{1}{\psi_j} - 1 \right) + \left( n_j + (a_j - n_{1j}) \left( \frac{1}{\psi_j} - 1 \right) \right)^2 \right]}
 \end{aligned}$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}$$

Using the equations above, we see that  $Z_j$  has mean and standard error given by

$$\begin{aligned}
 m_j &= \frac{n_j^2 \pi_j^{(1)} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}, \text{ and} \\
 se_j &= \sqrt{\frac{n_j^3 (n_j - 1)}{n_{1j} n_{2j} a_j (n_j - a_j) \left( \frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}} \right)}}
 \end{aligned}$$

### Rate Measure

A rate measure also has only one parameter of interest in each cell, the rate at which a phenomenon is observed relative to a base unit, e.g. the number of troubles per available line. A possible lack of parity may be due to a difference in cell rates. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells is:

$$H_0: r_{1j} = r_{2j}$$

$$H_a: r_{2j} = \varepsilon_j r_{1j} \quad \varepsilon_j > 1 \text{ and } j = 1, \dots, L.$$

Given the total number of ILEC and CLEC transactions in a cell,  $n_j$ , and the number of base elements,  $b_{1j}$  and  $b_{2j}$ , the number of ILEC transaction,  $n_{1j}$ , has a binomial distribution from  $n_j$  trials and a probability of

$$q_j^* = \frac{r_{1j} b_{1j}}{r_{1j} b_{1j} + r_{2j} b_{2j}}.$$

Therefore, the mean and variance of  $n_{1j}$ , are given by

$$\begin{aligned} E(n_{1j}) &\equiv n_j q_j^* \\ \text{var}(n_{1j}) &= n_j q_j^* (1 - q_j^*) \end{aligned}$$

Under the null hypothesis

$$q_j^* = q_j = \frac{b_{1j}}{b_j},$$

but under the alternative hypothesis

$$q_j^* = q_j^a = \frac{b_{1j}}{b_{1j} + \varepsilon_j b_{2j}}.$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}.$$

Using the relationships above, we see that  $Z_j$  has mean and standard error given by

$$m_j = \frac{n_j (q_j^a - q_j)}{\sqrt{n_j q_j (1 - q_j)}} = (1 - \varepsilon_j) \sqrt{\frac{n_j b_{1j} b_{2j}}{b_{1j} + \varepsilon_j b_{2j}}}, \text{ and}$$

$$se_j = \sqrt{\frac{q_j^a (1 - q_j^a)}{q_j (1 - q_j)}} = \sqrt{\varepsilon_j} \frac{b_j}{b_{1j} + \varepsilon_j b_{2j}}.$$

#### Determining the Parameters of the Alternative Hypothesis

In this appendix we have indexed the alternative hypothesis of mean measures by two sets of parameters,  $\lambda_j$  and  $\delta_j$ . Proportion and rate measures have been indexed by one set of parameters each,  $\psi_j$  and  $\varepsilon_j$  respectively. While statistical science can be used to evaluate the impact of different choices of these parameters, there is not much that an appeal to statistical principles can offer in directing specific choices. Specific choices are best left to telephony experts. Still, it is possible to comment on some aspects of these choices:

- **Parameter Choices for  $\lambda_j$ .** The set of parameters  $\lambda_j$  index alternatives to the null hypothesis that arise because there might be greater unpredictability or variability in the delivery of service to a CLEC customer over that which would be achieved for an otherwise comparable ILEC customer. While concerns about differences in the variability of service are important, it turns out that the truncated Z testing which is being recommended here is relatively insensitive to all but very large values of the  $\lambda_j$ . Put another way, reasonable differences in the values chosen here could make very little difference in the balancing points chosen.

- Parameter Choices for  $\delta_j$ . The set of parameters  $\delta_j$  are much more important in the choice of the balancing point than was true for the  $\lambda_j$ . The reason for this is that they directly index differences in average service. The truncated Z test is very sensitive to any such differences; hence, even small disagreements among experts in the choice of the  $\delta_j$  could be very important. Sample size matters here too. For example, setting all the  $\delta_j$  to a single value –  $\delta_j = \delta$  – might be fine for tests across individual CLECs where currently in Louisiana the CLEC customer bases are not too different. Using the same value of  $\delta$  for the overall state testing does not seem sensible, however, since the state sample would be so much larger.
- Parameter Choices for  $\psi_j$  or  $\varepsilon_j$ . The set of parameters  $\psi_j$  or  $\varepsilon_j$  are also important in the choice of the balancing point for tests of their respective measures. The reason for this is that they directly index increases in the proportion or rate of service performance. The truncated Z test is sensitive to such increases; but not as sensitive as the case of  $\delta_j$  for mean measures. Sample size matters here as well. As with mean measures, using the same value of  $\psi$  or  $\varepsilon$  for the overall state testing does not seem sensible since the state sample would be so much larger.

The bottom line here is that beyond a few general considerations, like those given above, a principled approach to the choice of the alternative hypotheses to guard against, must come from elsewhere.

## DECISION PROCESS

Once  $Z^T$  has been calculated, it is compared to the balancing critical value to determine if the ILEC is favoring its own customers over a CLEC's customers.

This critical value changes as the ILEC and CLEC transaction volume change. One way to make this transparent to the decision maker, is to report the difference between the test statistic and the critical value,  $diff = Z^T - c_B$ . If favoritism is concluded when  $Z^T < c_B$ , then the  $diff < 0$  indicates favoritism.

This make it very easy to determine favoritism: a positive  $diff$  suggests no favoritism, and a negative  $diff$  suggests favoritism.

# EXHIBIT D

BST VSEEM REMEDY PROCEDURE**TIER-1 CALCULATION FOR RETAIL ANALOGUES:**

1. Calculate the overall test statistic for each CLEC;  $z_{CLEC1}^T$  (See Exhibit C)
2. Calculate the balancing critical value( $C_{B_{CLEC1}}$ ) that is associated with the alternative hypothesis (for fixed parameters  $\delta$ ,  $\psi$  or  $\epsilon$ ). (See Exhibit C)
3. If the overall test statistic is equal to or above the balancing critical value, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.;  
 $z_{CLEC1}^T - C_{B_{CLEC1}}$
5. Calculate the Volume Proportion using a linear distribution with slope of  $\frac{1}{4}$ . This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4;  
 $ABS((z_{CLEC1}^T - C_{B_{CLEC1}}) / 4)$ . All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total CLEC<sub>1</sub> Volume in the negatively affected cell; where the cell value is negative. (See Exhibit C)
7. Calculate the payment to Adelphia by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, Adelphia payment = Affected Volume<sub>CLEC1</sub> \* \$\$ from Fee Schedule

Example: Adelphia Missed Installation Appointments (MIA) for Resale POTS

	$n_I$	$n_C$	$MIA_I$	$MIA_C$	$z_{CLEC1}^T$	$C_B$	Parity Gap	Volume Proportion	Affected Volume
State	50000	600	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell					<u><math>z_{CLEC1}</math></u>				
1		150	0.091	0.112	-1.994				64
2		75	0.176	0.098	0.734				
3		10	0.128	0.333	-2.619				4
4		50	0.158	0.242	-2.878				21
5		15	0.245	0.075	1.345				
6		200	0.156	0.130	0.021				
7		30	0.166	0.233	-0.600				13
8		20	0.106	0.127	-0.065				9
9		40	0.193	0.218	-0.918				17
10		10	0.160	0.235	-0.660				4
									<hr/> 133

where  $n_I$  = ILEC observations and  $n_C$  = Adelphia observations

Payout for Adelphia is (133 units) \* (\$100/unit) = \$13,300

**TIER-2 CALCULATION for RETAIL ANALOGUES:**

1. Tier-2 is triggered by three monthly failures of any VSEEM submetric in the same quarter.
2. Calculate the overall test statistic for the CLEC Aggregate using all transactions from the calendar quarter;  $Z_{CLECA}^T$
3. Calculate the balancing critical value( $C_{B_{CLEC1}}$ ) that is associated with the alternative hypothesis (for fixed parameters  $\delta$ ,  $\psi$  or  $\epsilon$ ). (See Exhibit C)
4. If the overall test statistic is equal to or above the balancing critical value for the calendar quarter, stop here. Otherwise, go to step 5.
5. Calculate the Parity Gap by subtracting the value of step 3. from that of step 2.;  
 $Z_{CLECA}^T - C_{B_{CLECA}}$
6. Calculate the Volume Proportion using a linear distribution with slope of  $\frac{1}{4}$ . This can be accomplished by dividing the Parity Gap from step 5. by 4;  $ABS((Z_{CLECA}^T - C_{B_{CLECA}}) / 4)$ . All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
7. Calculate the Affected Volume by multiplying the Volume Proportion from step 6. by the Total CLECA Volume (CLEC Aggregate) in the negatively affected cell; where the cell value is negative (See Exhibit C).
8. Calculate the payment to State Designated Agency by multiplying the result of step 7. by the appropriate dollar amount from the fee schedule.

So, State Designated Agency payment = Affected Volume<sub>CLECA</sub> \* \$\$ from Fee Schedule

**Example: CLEC-A Missed Installation Appointments (MIA) for Resale POTS**

	$n_i$	$n_c$	$MIA_i$	$MIA_c$	$Z_{CLECA}^T$	$C_B$	Parity Gap	Volume Proportion	Affected Volume
State Quarter1	180000	2100	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell					$Z_{CLECA}$				
1		500	0.091	0.112	-1.994				214
2		300	0.176	0.098	0.734				
3		80	0.128	0.333	-2.619				34
4		205	0.158	0.242	-2.878				88
5		45	0.245	0.075	1.345				
6		605	0.156	0.130	0.021				
7		80	0.166	0.233	-0.600				34
8		40	0.106	0.127	-0.065				17



9	165	0.193	0.218	-0.918
10	80	0.160	0.235	-0.660

71
34
<hr/> 492

where  $n_1$  = ILEC observations and  $n_2$  = CLEC-A observations

Payout for CLEC-A is (492 units) \* (\$300/unit) = \$147,600

### Tier-3

Tier-3 uses the monthly CLEC Aggregate results in a given State. Tier-3 is triggered when five of the twelve Tier-3 sub-metrics experience consecutive failures in a given calendar quarter. The table below displays a situation that would trigger a Tier-3 failure, and one that would not.

Process	Measures	TIER-3 FAILURE X = Miss			NOT A TIER-3 FAILURE X = Miss		
		Jan	Feb	Mar	Jan	Feb	Mar
Percent Missed Installation Appointments	Resale POTS	X	X	X	X		
	Resale Design	X			X	X	X
	UNE Loop & Port Combo		X				
	UNE Loops	X	X	X			
Percent Missed Repair Appointments	Resale POTS	X	X	X	X		X
	Resale Design		X	X		X	
	UNE Loop & Port Combo					X	X
	UNE Loops				X		
Billing	Billing Accuracy	X	X	X			
	Billing Timeliness				X	X	X
Trunk Blockage	Percent Trunk Blockage	X	X	X			
Collocation	Percent Missed Collocation Due Dates						

Tier-3 is effective immediately after quarter results, and can only be lifted when two of the five failed sub-metrics show compliance for two consecutive months in the following quarter.

All tiers standalone, such that triggering Tier-3 will not cease payout of any Tier-1 or Tier-2 failures.

TIER-1 CALCULATION FOR BENCHMARKS:

1. For each CLEC, with five or more observations, calculate monthly performance results for the State.
2. CLECs having observations (sample sizes) between 5 and 30 will use Table I below:

TABLE I SMALL SAMPLE SIZE TABLE  
(95% Confidence)

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark	Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
5	60.00%	80.00%	16	75.00%	87.50%
6	66.67%	83.33%	17	76.47%	82.35%
7	71.43%	85.71%	18	77.78%	83.33%
8	75.00%	75.00%	19	78.95%	84.21%
9	66.67%	77.78%	20	80.00%	85.00%
10	70.00%	80.00%	21	76.19%	85.71%
11	72.73%	81.82%	22	77.27%	86.36%
12	75.00%	83.33%	23	78.26%	86.96%
13	76.92%	84.62%	24	79.17%	87.50%
14	78.57%	85.71%	25	80.00%	88.00%
15	73.33%	86.67%	26	80.77%	88.46%
			27	81.48%	88.89%
			28	78.57%	89.29%
			29	79.31%	86.21%
			30	80.00%	86.67%

3. If the percentage (or equivalent percentage for small samples) is equal to or below the benchmark standard, stop here. Otherwise, go to step 4.
4. Determine the Volume Proportion by taking the difference between the benchmark and the actual performance result.
5. Calculate the Affected Volume by multiplying the Volume Proportion from step 4. by the Total CLEC<sub>1</sub> Volume.
6. Calculate the payment to Adelphia by multiplying the result of step 5. by the appropriate dollar amount from the fee schedule.

So, Adelphia payment = Affected Volume<sub>CLEC1</sub> \* \$\$ from Fee Schedule

**Example: Adelphia Missed Installation Appointments (MIA) for UNE Loops**

	$n_c$	Benchmark	MIA <sub>c</sub>	Volume Proportion	Affected Volume
State	600	9%	12%	.03	18

Payout for Adelphia is (18 units) \* (\$400/unit) = \$7,200

**TIER-1 CALCULATION FOR BENCHMARKS (IN THE FORM OF A TARGET):**

1. For each, with five or more observations, CLEC calculate monthly performance results for the State.
2. GLECs having observations (sample sizes) between 5 and 30 will use Table I above.
3. Calculate the interval distribution based on the same data set used in step 1.
4. If the 'percent within' is equal to or exceeds the benchmark standard, stop here. Otherwise, go to step 5.
5. Determine the Volume Proportion by taking the difference between 100% and the actual performance result.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total CLEC<sub>1</sub> Volume.
7. Calculate the payment to Adelphia by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, Adelphia payment = Affected Volume<sub>CLEC1</sub> \* \$\$ from Fee Schedule

**Example: Adelphia Reject Timeliness**

	$n_c$	Benchmark	Reject Timeliness <sub>c</sub>	Volume Proportion	Affected Volume
State	600	95% within 1 hour	93% within 1 hour	.07	42

Payout for Adelphia is (42 units) \* (\$100/unit) = \$4,200

**TIER-2 CALCULATIONS for BENCHMARKS:**

Tier-2 calculations for benchmark measures are the same as the Tier-1 benchmark calculations except the CLEC Aggregate data having failed for three months in a given calendar quarter is being assessed.

# EXHIBIT E

Table-1

**LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES**

<b>PER AFFECTED ITEM</b>						
	<b>Month 1</b>	<b>Month 2</b>	<b>Month3</b>	<b>Month4</b>	<b>Month 5</b>	<b>Month 6</b>
Ordering	\$40	\$50	\$60	\$70	\$80	\$90
Provisioning	\$100	\$125	\$175	\$250	\$325	\$500
Provisioning UNE (Coordinated Customer Conversions)	\$400	\$450	\$500	\$550	\$650	\$800
Maintenance and Repair	\$100	\$125	\$175	\$250	\$325	\$500
Maintenance and Repair UNE	\$400	\$450	\$500	\$550	\$650	\$800
LNP	\$150	\$250	\$500	\$600	\$700	\$800
IC Trunks	\$100	\$125	\$175	\$250	\$325	\$500
Collocation	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000

Table-2

**VOLUNTARY PAYMENTS FOR TIER-2 MEASURES**

	<b>Per Affected Item</b>
OSS	
Pre-Ordering	\$20
Ordering	\$60
Provisioning	\$300
UNE Provisioning (Coordinated Customer Conversions)	\$875
Maintenance and Repair	\$300
UNE Maintenance and Repair	\$875
Billing	\$1.00
LNP	\$500
IC Trunks	\$500
Collocation	\$15,000

**Attachment 10**  
**Bona Fide Request/New Business Request**

## **Bona Fide Request/New Business Request Process for Further Unbundling**

- 1.1 BellSouth shall, upon request of Adelphia, provide to Adelphia access to its network elements at any technically feasible point for the provision of Adelphia's telecommunications service in accordance with applicable law and FCC rules and orders. Any request by Adelphia for access to a network element, interconnection option, or for the provisioning of any service or product that is not already available pursuant to this Agreement, including Section 1.2 below, shall be treated as a Bona Fide Request/New Business Request, and shall be submitted to BellSouth pursuant to the Bona Fide Request/New Business Request process set forth following.
- 1.2 BFR Not Required. Where the FCC or Commission, in a generic order, has required or shall require BellSouth to offer a network element, interconnection option, or service not covered in this Agreement, BellSouth shall offer to Adelphia said network element, interconnection option, or service in the same fashion as required by the generic proceeding and without submission of a BFR. If BellSouth provides any network element, interconnection option, or service that is not identified in this Agreement to itself, to any BellSouth affiliate, or to any other telecommunications carrier, BellSouth shall make available to Adelphia, upon Adelphia's request, and without submission of a BFR, the same network element, interconnection option, or service at parity. The Parties agree to amend the Agreement to include any rates, terms and conditions for any new network element, interconnection option, or service that BellSouth is required to make available to Adelphia under this section.
- 1.3 A Bona Fide Request/New Business Request shall be submitted in writing to Adelphia's Account Manager by Adelphia and shall specifically identify the requested service date, technical requirements, space requirements and/or such specifications that clearly define the request such that BellSouth has sufficient information to analyze and prepare a response. Such a request also shall include Adelphia's designation of the request as being (i) pursuant to the Telecommunications Act of 1996 or (ii) pursuant to the needs of the business.
- 1.4 To the extent possible, BellSouth will utilize information from previously developed BFRs to address similar arrangements in order to shorten the response times for the currently requested BFR and to decrease the development costs for the currently requested BFR. In the event Adelphia has submitted a BFR for a

network element, interconnection option, or service and BellSouth determines in accordance with the provisions of this Section that the BFR is technically feasible, the Parties agree that Adelphia's subsequent request or order for the identical type of network element, interconnection option, or service shall not be subject to the BFR process. To the extent BellSouth has previously deployed an identical network element, interconnection option, or service under a previous BFR for itself or any other carrier, a subsequent BFR is not required. However, BellSouth may require Adelphia to reimburse the initial requesting carrier a pro rata share of the development costs as defined below. Similarly, if BellSouth or another CLEC avoids development costs because Adelphia has already paid such costs for a particular network element, interconnection option, or service, then BellSouth shall reimburse Adelphia a pro rata share of the development costs paid. For purposes of this Section, an "identical" request shall be one that is materially identical to a previous request with respect to the information provided.

- 1.5 BellSouth acknowledgment. Within five (5) business days of receipt of a BFR, BellSouth shall acknowledge in writing its receipt and identify its single point of contact responsible for responding to the BFR and shall request any additional information needed to process the BFR. Within five (5) business days of receipt by BellSouth of a BFR from Adelphia, BellSouth agrees to confer with Adelphia to discuss the BFR to ensure that: (i) BellSouth properly understands Adelphia's BFR, and (ii) to inform Adelphia of the existence of any similar BFRs made by other parties. Notwithstanding the foregoing, BellSouth may request additional information from Adelphia at any time during the processing of the BFR. If BellSouth claims, in response to a BFR made under this Section, that it cannot offer a particular network element, interconnection option, or service because it is technically infeasible, BellSouth must specify in detail which technical specifications cannot be met.
- 1.6 Preliminary Analysis delivery. Unless otherwise agreed by both Parties in writing, within thirty (30) calendar days of its receipt of a BFR, BellSouth shall provide to Adelphia a Preliminary Analysis of the BFR. If BellSouth determines that it is not able to provide Adelphia a Preliminary Analysis within thirty (30) calendar days of BellSouth's receipt of the BFR, BellSouth will inform Adelphia as soon as practicable. Adelphia and BellSouth will then determine a mutually agreeable date for delivery of the Preliminary Analysis. Within five (5) business days of Adelphia's receipt of the BellSouth Preliminary Analysis and upon Adelphia's request, BellSouth



agrees to confer with Adelphia to discuss BellSouth's Preliminary Analysis.

- 1.7 Preliminary Analysis details. The Preliminary Analysis will state whether BellSouth can meet Adelphia's requirements and shall include BellSouth's proposed price (plus or minus 25 percent) and the date the BFR can be met. If BellSouth cannot provide the network element, interconnection option, or service by the requested date, it shall provide an alternative proposed date together with a detailed explanation as to why BellSouth is not able to meet Adelphia's requested date. The Preliminary Analysis also will include a detailed breakdown of the costs supporting the proposed price, including the development costs, as defined below, necessary to complete Adelphia's BFR. BellSouth also shall indicate in the Preliminary Analysis its agreement or disagreement with Adelphia's designation of the BFR as an obligation under the Telecommunications Act of 1996. If BellSouth does not agree with Adelphia's designation, it may use the Dispute Resolution process set forth in Section 12. In no event, however, shall any dispute delay BellSouth's processing of the Request.
- 1.8 Notice to proceed. After providing the Preliminary Analysis to Adelphia, BellSouth shall proceed with Adelphia's BFR upon receipt of Adelphia's written "notice to proceed." This "notice to proceed" shall not be construed by BellSouth as a waiver of Adelphia's right to invoke any dispute resolution process as set forth in Section 12 of the General Terms and Conditions as to any issue, including BellSouth's proposed price, the reasonable, demonstrable, and actual costs incurred in the event of Adelphia's cancellation of a BFR, or the amount of development costs paid. All payments are subject to adjustment according to the outcome of the dispute resolution process. In no event shall any dispute delay BellSouth proceeding with completing the BFR.
- 1.9 Development costs. After receipt and review of BellSouth's Preliminary Analysis, if Adelphia decides to proceed, Adelphia agrees to pay the fixed amount identified in the Preliminary Analysis for the initial work required to develop the project plan, create the design parameters, and establish all activities and resources required to complete the BFR. These costs will be referred to as "development costs." The development costs identified in the Preliminary Analysis are fixed. Adelphia will begin processing the payment of development costs at the time it issues the written "notice to proceed" with payment due to BellSouth within 15 days of the issuance of the notice to proceed.

- 1.10 Interim payment in the event of price dispute. In the event of a dispute over payments made by Adelphia or requested by BellSouth, including development costs and any interim progress payment, upon BellSouth's written request, Adelphia agrees to negotiate an interim lump sum progress payment to compensate BellSouth for its reasonable, demonstrable and actual costs incurred in processing Adelphia's BFR. The interim lump sum progress payment shall be calculated by determining the average between BellSouth's proposed price and Adelphia's estimate of the price for processing its BFR. Adelphia agrees to pay 50% of this amount as the interim lump sum progress payment. If Adelphia's proposed price is less than 50% of BellSouth's proposed price, the average shall be calculated by assuming that Adelphia's price is exactly 50% of BellSouth's proposed price.
- 1.11 Firm quote delivery. As soon as possible, but in no event later than sixty-five (65) calendar days after receipt of the Request, BellSouth shall provide Adelphia with a firm BFR response that will include, at a minimum, the firm availability date, the installation intervals, a binding price quote, and a final detailed breakdown of all costs supporting the final price.
- 1.12 Acceptance or rejection of firm quote. Within thirty (30) calendar days after receipt of the firm BFR response from BellSouth, Adelphia will notify BellSouth in writing of its acceptance or rejection of BellSouth's proposal. If BellSouth receives no response to the firm quote from Adelphia within the thirty day time frame, BellSouth shall issue a written request for confirmation that Adelphia does not wish to proceed with the BFR. If BellSouth receives no response from Adelphia within five (5) calendar days of its written request for confirmation, BellSouth may consider the BFR cancelled. Adelphia agrees to pay BellSouth the reasonable, demonstrable, and actual costs directly related to complying with Adelphia's BFR up to the date of cancellation.
- 1.13 Pricing Principles. Unless Adelphia agrees otherwise, all proposed prices shall be derived in accordance with the Act and any applicable FCC and Commission rules and regulations. Payments for services purchased under a BFR will be made as specified in this Agreement, unless otherwise agreed to by Adelphia.
- 1.14 Amendment. Upon Adelphia's acceptance of the firm quote by BellSouth, the Parties shall amend the Agreement to incorporate the network element, interconnection option, or service contemplated by the BFR. The amendment shall include all pertinent rates, terms and conditions and shall be filed with the

appropriate regulatory Commission pursuant to the requirements of the Act.